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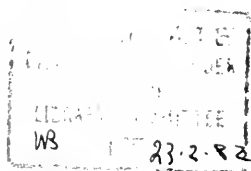
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ERRATA.

Page 79, line 36, for "1160" read "1100."

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THE QUEEN'S CORONATION RING.¹

By J. WICKHAM LEGG, F.S.A.

Those who were present at the meeting of the Institute in London in 1893 may remember that when the coronation *ornamenta* were pointed out there was one wanting, and that was the coronation ring ; it could not be shown at Westminster because it never leaves the Queen. I may remind the Institute of one incident connected with the last coronation ; the ring was found to have been made too small for the Queen's wedding finger ; and once it was put on by the archbishop as a sign of the Sovereign's wedding to the realm of England, it could not easily be taken off again : a happy omen of the length of time that Her Majesty was to reign over us, so that now we are celebrating the sixtieth year of her beneficent rule.

Though the ring never leaves the Sovereign, and it is thus impossible for us to see it here, yet the Queen has been graciously pleased to command that the ring shall be photographed, and copies of these photographs I present to the Institute. And at the same time two other coronation rings, in the Queen's possession, were photographed, those of King William IV. and his consort, Queen Adelaide.

There is also a coronation ring of King William III. or Queen Mary II. now in the possession of the Duke of Portland, who has very kindly allowed me to have the ring photographed, and a copy of this photograph I am also able to present to the Institute.

Coronation rings seem to be extremely rare. I find on enquiry that there is no such ring known in the collection of the British Museum or of the Ashmolean Museum at Oxford. So that a description and drawing of those within our reach may not be unacceptable to members of the Institute, and however imperfect such an account may be, it may yet stimulate inquiry, and cause attention to

¹ Read at the Monthly Meeting of the Institute, December 2nd, 1896.

be paid to rings in the possession of private persons who do not suspect the history of the jewels.

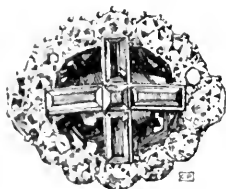
The Queen's coronation ring is of gold, two millimeters broad at its narrowest part; approaching the bezel, it swells out into a width of five millimeters: the diameter of the ring itself is 15 millimeters.

The stone of the ring is a large rounded sapphire (*en cabochon*), set *à jour* or open at the back, 13 millimeters in diameter and surrounded by brilliants. The sapphire is inlaid with a cross of equal arms, made of rectangular rubies, one small table ruby, foursquare, being in the centre of the cross.



THE QUEEN'S CORONATION RING.

The Queen's ring has been constructed on lines like those of King William IV.'s ring, only it is very much smaller in size. The King's ring is also a sapphire, inlaid with a ruby cross, the diameter of the sapphire horizontally being 15 millimeters. The diameter of the ring is 24 millimeters. The hoop of the ring has a width of three millimeters.



KING WILLIAM IV.'S CORONATION RING.

Queen Adelaide's coronation ring is of gold, the hoop four millimeters wide. It is 16 millimeters in diameter

and the stone is an oblong ruby set with brilliants, which is 13 millimeters long and 10 wide. It is not engraved. There are rubies on the part of the ring which swells out to receive the great stone, and on the outside of the hoop, 13 in number; all are *à jour*, or open on the inside of the ring.



QUEEN ADELAIDE'S CORONATION RING.

Queen Mary II.'s ring, belonging to the Duke of Portland, is of gold and the hoop is narrow, hardly a millimeter broad; the diameter is 18 millimeters. The stones are: an oblong ruby, ten millimeters long by eight wide, set flush,¹ facettèd, eight sided, and not engraved; a diamond at each end of the ruby, oval, five millimeters by three. None of the stones is *à jour*.



QUEEN MARY II.'S CORONATION RING.

This ring was exhibited at the Grafton Gallery in the autumn of 1894. Accompanying it was a paper on which was written:

"In this paper is contained Queen Mary's Ruby Coronation Ring y^e old setting shews how it was when she had it first; y^e paper with y^e ring is Queen Mary's hand writing and gives a reason why it was sett in y^e manner. A.A."

This must refer to the writing which follows: "this

¹ "Set flush" is an expression used by jewellers to signify that the stone is

closed over with gold; "*à jour*" means that the stone is open at the back.

Ruby so set was given me by the Prince three days after we wear married w^{ch} being the first thing he gave me I have ever had a perticular esteem for it when I was to be crowned I had it made big enough for y^e finger for y^e occasion but by mistake it was put on y^e King's finger and I had to put on [his?] Mine was designed for him, but we changed & I have worn it ever since till last thursday y^e 17th of Nov. 1689 y^e stone dropt out at diner I was extreemly¹ troubled at it upon the account forementioned. therefore having found it lockit up for fear of y^e like mischance againe."

The writing that follows has been added later and in some parts is hard to make out, the paper having been folded through the second line:

"Oct. y^e [date illegible] 1694 I gave it at [? to] Beauvoir to set fast" [here the writing is almost illegible].

The ring seems to have been worn by the Egyptians² and the Greeks; the Romans gave it to their civil magistrates; whence it seems to have passed to the Christian bishop and the Christian king. It is not, however, spoken of among the *ornamenta* in the coronation service of the pontifical ascribed to Egbert of York, who died in 766,³ nor in the very similar service in the Leofric mass book.⁴

Many historians now-a-days reject the statement that Offa, King of the East Angles, gave his successor the ring which he had received from the bishop when he was made king,⁵ as they look upon this Offa as a mythical person. But in the coronation service of the Benedictional of Robert of Jumièges,⁶ Bishop of London and Archbishop of Canterbury just before the Norman Conquest,

¹ Here the writing passes from recto to verso.

² Genesis xli, 42. "And Pharaoh took off his signet ring from his hand, and put it upon Joseph's hand." (R.V.)

³ *The Pontifical of Egbert, Archbishop of York*, A.D. 732-766, ed. W. Greenwell, Surtees Society, 1853. p. 101.

⁴ *The Leofric Missal*, ed. F. E. Warren, Oxford, Clarendon Press, 1883. p. 231.

See J. Battely, *Antiquitates S.*

Edmundi Burgi, Oxon. 1745. Append. p. 119.

⁶ fo. 166. I quote from a transcript in the possession of the Henry Bradshaw Society. (The book is really a pontifical, though named a benedictional.) This recension of the Coronation service appears also in MS. Tiborius B. viii. in the British Museum; and elsewhere. It is printed in A. Taylor's *Glory of Regality*, Lond. 1820. p. 395; and in the *York Pontifical*, ed. W. G. Henderson, Surtees Society, 1875. p. 270.

a ring is given immediately after the anointing, before the sword, crown, and sceptre.

The formula is :

Hic detur anulus.

Accipe anulum signaculum videlicet sanctae fidei soliditatem regni Augmentum potentiae per quae scias triumphali potentia hostes repellere hereses destruere subditos coadunare et Catholicae fidei perseuerabilitati conecti. per dominum.

Sequitur oratio.

Deus cuius est omnis potestas et dignitas da famulo tuo propriae suae dignitatis effectum in qua te remunerante permaneat semperque timeat tibi que iugiter placere contendat. per dominum.

These formulae are to be found word for word in an Order for the Coronation of the kings of the Franks printed by Martene,¹ and also in the English coronation service printed by Dr. Henderson in his appendix to Christopher Bainbridge's Pontifical.² The ring in this order is also given immediately after the anointing, and before the sword, crown, and sceptre. But in the next recension of the order it comes after the sword and crown, and before the sceptre and verge, are given, and an alteration is made in the words used in the delivery of the ring which run thus :

Accipe regiae dignitatis anulum et per hunc in te Catholicae fidei signaculum quia ut hodie ornaris caput et princeps regni ac populi ita perseveres auctor ac stabilitor Christianitatis et Christianae fidei, ut felix in opere, locuples in fide, cum Rege regum glorieris ; cui est honor et gloria per aeterna saeculorum saecula. Amen.³

Words like these are continued to the present day, only since the time of James I. they are said in English.

In the recension of the coronation order contained in the *Liber regalis* the ring is delivered at the same place and with the same words, but an exorcism and blessing

¹ Edm. Martene, *De antiquis ecclesiae ritibus*, Lib. ii. cap. x. ordo v. Bassani, 1788. t. ii. p. 117.

² *Liber pontificalis* Chr. Bainbridge

Archiepiscopi Eboracensis, ed. Henderson, Surtees Society, 1875. Appendix III. p. 273.

³ Idem, appendix I. p. 219.

of the ring have been added.¹ When the *Liber regalis* appeared in an English dress for the Coronation of King James I. the blessing and exorcism both disappeared, while the words at the delivery of the ring, and the collect after, were retained.² It is ordered also that the ring shall be set on the king's wedding finger, the fourth finger of the left hand.³ In the Order for King Charles I. the second prayer, the blessing of the ring, is restored, with the words at the delivery of the ring, and the collect.⁴ It is also added that the Archbishop shall put "*the Ring on the fourth finger of the King's right hand.*" All these three forms were recited at the Coronation of King Charles II.⁵ but at that of King James II. the blessing of the ring and the collect following the delivery are omitted, and only the words at the delivery of the ring remain⁶; and though the latter remain, yet I do not find certainly that the former have ever been restored in any of the orders printed after.

The delivery of the ring, immediately after the anointing, took place in the first English orders earlier than in the later mediæval orders; but at the coronation of Queen Anne we find the earlier place was restored, and the ring delivered before the crown was set on the Queen's head, after the delivery of the orb and pallium.⁷ It would seem to have retained this place ever since. It is so at all events in the Coronation Orders of King George IV. King William and Queen Adelaide, and of the Queen. It is curious to note this return, it may be unconscious, to the earlier custom: the same kind of return to earlier usage may be noticed in another part of Queen Anne's order; that the coronation is interpolated into the Eucharistic service itself, after the gospel and Nicene

¹ See my edition of the *Liber regalis* in *Missale ad usum ecclesie Westmonasteriensis*, Henry Bradshaw Society, 1833, fasc. ii. vol. 703.

² W. Pryme, *Signal Loyalty and Devotion of Gods true Saints and pious Christians towards their Kings*, London, 1660. Part ii. p. 263.

³ Thomas Milles, *Catalogue of Honor*, Lond. 1610. p. 60.

⁴ *The Manner of the Coronation of King Charles I. of England*, ed. Chr. Wordsworth, Henry Bradshaw Society,

Lond. 1892. p. 41. In one manuscript the exorcism is also translated.

⁵ Sir Edw. Walker, *A circumstantial account of . . . the Coronation of His Majesty King Charles the Second*, London, T. Baker, 1820. p. 103.

⁶ Francis Sandford, *A History of the Coronation of . . . James II.* In the Savoy, 1687. p. 95.

⁷ J. R. Planché, *Regal Records*, Lond. 1838. p. 127. The account professes to be drawn "from official records in the College of Arms & MSS. in the British Museum."

Creed, the very place in which it appears in the pontifical of Egbert; whereas in the *Liber regalis* the coronation took place before mass began. As far as I can find out the custom of Queen Anne's order continued to 1838. It will be noticed that the recitation of the Nicene Creed is thus made a prelude to the coronation ceremonies, just as it precedes them in the Russian and Constantinopolitan orders.

The exact *formula* of delivery is as follows :

Then an Officer of the Jewel House delivers to the Lord Chamberlain the Queen's Ring, who delivers the same to the Archbishop, in which a Table Jewel is enchased; the Archbishop puts it on the Fourth Finger of Her Majesty's Right Hand, and saith;

Receive this Ring, the Ensign of Kingly Dignity, and of Defence of the Catholic Faith; and as You are this day solemnly invested in the Government of this earthly Kingdom, so may You be sealed with that Spirit of Promise, which is the Earnest of an heavenly Inheritance, and reign with Him who is the blessed and only Potentate, to whom be Glory for ever and ever. *Amen.*

The earlier Coronation Orders do not give us much detail of the material of which the ring is to be composed, and though the ring with which the king was consecrated is found in the inventory of the jewels of Edward I. yet no description is given of it beyond saying that it was of gold.¹ The earliest instance of a description that I have met with is in some letters patent of King Richard II. in the muniment room of Westminster Abbey. He thereby records that he has given to the shrine of the glorious confessor *quoddam solenne iocale, anulum videlicet aureum cum quodam lapide precioso vocato ruby non modici valoris in eodem anulo inserto*; but that he will retain the ring for his own use unless he go out of England, and that then it shall be placed on the shrine, but restored to him as soon as he returns back again to England: and after his death the king desires that the ring shall be used in the coronation of his successors; but nevertheless returned to the shrine as soon as the solemnity of crowning be over.²

¹ "Anulus auri cum quo fuit Rex consecratus." (John Topham, *Liber quotidianus Contrarotulatores Garde-robæ, anno regni Regis Edwardi Primi*

vicesimo octavo, London, Soc. Antiq. 1787. p. 351.)

² *Archæologia*, 1890. Vol. lii. p. 282.

This ring seems to have been restored to the abbey by king Henry V. for Widmore notes that this king "restored a ring, in which was a ruby valued at a thousand marks; it was first given by king Richard II. but had been taken away."¹

The stone or material is mentioned neither in James I.'s or Charles I.'s order; but it appears in Charles II. "Then the Master of the Jewell-House delivered a Ring with a Ruby to the Arch-Bp."² and in King James II. further details are given "The *Master of the Jewell-House* delivered the KING'S RING (in which a *Table Ruby* was enchaced, and on that *S^t George's Cross* engraven) to the *Archbishop*."³ It has been seen that a ruby in a gold ring was used for the coronation of William and Mary. For the coronations between that of 1689 and 1831 I have no evidence: but King William IV. was invested with a gold ring of which the chief jewel was a sapphire marked with a ruby cross; and the same design may be noticed in the ring given at the last coronation.

Here we may notice an unconscious imitation of the ceremonies used in the consecration of a bishop. From very ancient times a ring has been part of the ensigns of a bishop. In the middle ages the episcopal ring was usually adorned with a sapphire: it is curious to note that at the last two coronations, at all events, the traditional ruby of the coronation ring has been changed into the episcopal sapphire.

The King's ring, with the exception of that of King James I., was put on the wedding finger of the right hand. This is in accordance with the rule of the Sarum manual which directed that the wedding ring should be put upon the fourth finger of the bride's right hand⁴; not the left hand, as in the Edwardine marriage service, and all the editions of the Book of Common Prayer since.

¹ Richard Widmore, *An history of the church of St. Peter Westminster*, London, 1751. p. 113.

² Walker, *loc. cit.* A drawing is given of the ring on the same plate as the crown and pall.

³ Sandford, *loc. cit.* See also p. 21. There is a drawing of the ring on the "second plate of the regalia," No. xii. In a paper on the Scottish Regalia (John

J. Reid & Alexander J. S. Brook, *Proceedings of the Society of Antiquaries of Scotland*, 1890, p. 139.) there is a drawing of the ruby ring ascribed by tradition to the coronation at Holyrood of King Charles I.

⁴ *Manuale ad usum Sarum*, p. 19* in Appendix to *Manuale* . . . Ebor. Surtees Soc. 1875, ed. Henderson.

The ring of the Queen consort is placed on the same finger.¹ It is described by Sandford as “a Rich *Ring*” without further particulars; but in the “Second Plate of the Regalia” a drawing is given (No. xiii.) which shows a large stone, octagonal, without any engraving, and with sixteen smaller stones on the outside of the ring.² A later writer describes it as “likewise gold, with a large table ruby set therein, and sixteen other small rubies set round about the ring; of which those next the setting are the largest, the rest diminishing in proportion.”³ It will have been noticed that Queen Adelaide's ring as Queen Consort adheres to this rule that the outside of the ring shall be adorned with smaller rubies.

The Queen consort has been invested with a ring as long as the reigning king. Both King and Queen had rings given to them in the coronation service of Robert of Jumièges, and the custom has continued down to the present time.

The Roman Emperor seems never to have been invested with a ring during his coronation at St. Peter's, though he was anointed, and he received the crown, orb, sceptre, and sword. Nor did the Empress receive a ring. In the modern Roman pontifical there is a service for the coronation of a king and queen, (in the present state of Europe it must be but rarely used) but no ring is given in either of these orders. But in the orders printed by Martene for the coronation of the emperor as king of Germany at Aken and as king of Italy at Milan, rings are given in both.⁴ The king of France seems always to have had a ring given at his coronation.

¹ From the different orders I can find no evidence that the ring of the Queen Consort is placed on the forefinger. At the coronation of Queen Anne, the consort of King James I. the ring was placed on the fourth finger of the left hand, just as it was upon the King's left hand. (See Milles, *loc. cit.*)

² Sandford, *op. cit.* p. 21.

³ Richard Thomson, *A faithful account of the . . . Coronation*, London, John Major, 1820, p. 87. This corresponds with Sandford's drawing.

⁴ Martene, *op. cit.* lib. II. cap. ix. ordd. iv. & v.

FAMILY PORTRAITS AT POMPEI.¹

By H. P. FITZ-GERALD MARRIOTT.

It was in 1889, eight years ago, six years before the publication of my work on Pompei, that it first struck me that some of the smaller round pictures containing the faces of men and women were not attempts at the delineation of heroic or mythological characters as had previously been roughly surmised. I found many others that had escaped special observation and were gradually being covered with mildew and falling to pieces or being washed out altogether, and I came to the conclusion that they were all family portraits of the owners and inhabitants of the houses. Indeed, there exists a picture in the Naples Museum showing a lady sketching, copying a stone bust; and we find from the classics that portrait painting was not unknown to the ancients long before the last days of Pompei. Monsieur Roger Peyre, in his *L'Empire Romain*, published in 1894, merely shows the portrait of Paquius Proculus and his wife, which not only from its rectangular frame, its utter want of likeness to anything mythological, but an inscription found in the house, which stated that the owner was a duumvir, was easily enough identified, especially as the man was represented in magisterial toga. But Peyre goes on to say that it was "the Egyptian funereal portraits, executed between the 1st and 5th century, and which M. Graf" found, that had "attracted attention to similar works which lie scattered in the museums, and shown us a new aspect of ancient painting." I, however, must again claim that I noticed and studied all the portraits in Pompei before the Fayoum portraits alluded to were discovered, more especially as M. Peyre does not refer to any of those more difficult to identify than the rectangular-shaped portrait of Paquius Proculus in the Naples Museum. I may say the same of M. Girard in his *La Peinture Antique*, published in November, 1891: he only refers to the picture of Paquius

¹ Read at the Monthly Meeting of the Institute, March 3rd, 1897.

Proculus which is to be seen in the Naples Museum, but he leaves unmentioned the beautiful portraits scattered throughout Pompei. Of Georg Ebers, whose work appeared at Leipzig in 1893, I may say much the same: he also was first attracted to the subject by the mummy portraits painted on wood, and discovered at Rubaijat in the Fayoum, that were only brought to Europe in 1889. His opinion, however, of their antiquity is that some of them at least date from the second century B.C.

Monsieur Pierre Gusman, who has copied all the portraits in Pompei which I had the honour and pleasure of pointing out to him, has successfully accomplished a difficult task. They have been reproduced very exactly: his original copies are the same size and exact colour as the original. The faults in the ancient drawing have not been corrected: where the fresco has worn away, and it was possible to trace the original form, this has been done, but in no other case has any addition or alteration been made; for example, in the face of the lady in Reg. VIII, Isola 5, House 39, No. 1, the mouth is out of place in the ancient painting, just as M. Gusman has represented it here with minutely strict accuracy. The colouring has been faithfully adhered to even when faded, and the special borders, which for certain reasons are important, have been also reproduced: and, not the least important, M. Gusman has caught the actual touch of the original artist. Indeed, so much did the *Ministre des Beaux Arts* of France think of these that he bought the entire collection of his perfect copies as they then stood.

In most of the houses of Pompei, more especially in some particular room, are small round or square frescoes from six to twelve inches in diameter, like medallions, painted on the walls, and portraying the faces of people who were probably the inmates of the house. They are different to the stereotyped style of fresco representing a Homeric or mythological scene; and the faces—as a rule one only in each circle, sometimes two—are those of ordinary and every-day individuals, various in expression and character, and of every age and state, and evidently nothing more nor less than family portraits. A few of these are exactly like some of the coarse brown peasants to be seen about the vineyards at the base of Vesuvius.

And as even now we still occasionally observe in Italy very Moorish types of face, owing to the Moorish raids in Europe, so in these frescoes we notice various types of features, and amongst them those that are Greek, those that are Roman, and even some of a very Egyptian physiognomy, all of which have gone far to form those of this southern people, and the oldest and purest of which have often survived even to the present day, since the characteristics belonging to the oldest and purest races eventually prevail in the formation of a mixed nation. These family portraits are very interesting, being nearly two thousand years old, or more. A fashion, however, existed amongst the Pompeians, and probably all the Roman peoples of that age, of sometimes having themselves portrayed in the character of some divinity: as "Jove's Mercury, and herald for a king," or

" Medea, who in the full tide of witchery
Had lured the dragon, gained her Jason's love
Infuriate in the wreck of hope withdrew,
And in the fired palace her twin offspring threw."

Thus among a number of other portraits of mothers and daughters, husbands and wives, a mother and her child, military men, and so on, there are one or two taken as Athena, or as Hermes, just as people nowadays, after private theatricals or a fancy dress ball, have sometimes had themselves photographed in the characters that they have for the time assumed. People in the first half of this century, and even till lately, have fallen too much into the habit of giving everything a classical name. In the Catalogue of the Naples Museum by Monaco and Rolfe is to be seen "The days of the Week"; these two sets of seven small round frescoes, very like those which are portraits, and representing different gods and goddesses, are in the Sixth Hall, Compartment LXVIII, Nos. 9519-9521. These seem unlikely to be the days of the week, since neither the Greeks nor the Romans divided it into a period of seven days. However, the Sabines, even till the end of the Republic, used a seven-day week, while the Romans had introduced the eight letters in the third century B.C. See *Smith's Dictionary of Greek and Roman Antiquities*, Vol. II, on the word *Nundinæ*; and the note in Rolfe's Catalogue, above quoted, for mention of a Greek

ten-day division of the month. See also in the Naples Museum the fresco portraits in the Fourth, Fifth, and Sixth Halls, Compartments LXVIII, Nos. 9518, 9520; XXXVIII, 9080, 9081, 9082, 9084, 9086, 9087; 9058, 9073, 9074, 9076, 9096, 9092; LII, 9281; XXVIII, 8985, 8989a, 8989b, 8988. These last four may also possibly be portraits represented in the characters of Venus and Cupid.

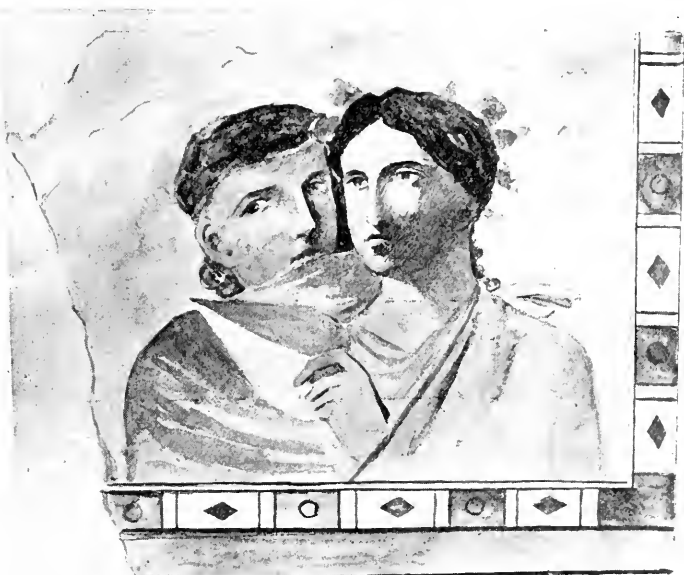
The portraits are not true fresco; indeed, there is very little of this anywhere in Pompei such as I am told Mr. Watts produced; but the ground-work is fresco, and sometimes the colouring of the robes, as well as that of the background, is fresco, especially in the Third style. Many portraits, in chiaroscuro of maroon or reddish-brown, seem to approach nearest to the true fresco, which is natural, as they were more quickly executed than the others. In true *fresco*, the colour is applied while the surface stucco or cement is still *fresh* and moist, and on large surfaces patch after patch would be prepared consecutively, for otherwise the entire surface would become dry. The surface colours—the flesh tints and the greater part of the figure—were probably all laid on when the ground-work was dry; so much so that the final delicate touches are perceptibly above the level of the general surface of the picture. This was probably then covered with wax, even if, as some suppose, the wax was not in the paint, which combination we can hardly imagine to have been likely. Taking for granted that the wax was laid on the picture when complete, then a small brasier or a hot iron was held near the wall and the wax melted to an invisible varnish, which effectually preserved the pictures and gave them that wonderful distinctness, which even now is apparent when the ruined walls are first unearthed. The best pictures and wall-decorations now left in Pompei are still preserved by a wash of beeswax dissolved in benzine. I myself, after removing the mildew as much as possible with damp and dry rags, have used this mixture to clean up and then preserve the portraits, which otherwise neglected would have soon fallen to pieces or been washed out. The colours moreover, many of which had previously almost disappeared or faded, shewed up with far greater clearness and effect after the application of my benzine and wax.

The touch of the ancient Pompeian artist in these family likenesses is peculiar: a bold free movement of the hand is easily seen by the direction of the brush marks. Effect is produced, as in other Pompeian works of art, by the free use of shade; so much so that at a short distance from even a half-decayed portrait the *tout ensemble* is quite recognisable.

Portraits are never found in the First, or relievo, style of decoration of the pre-Roman epoch, in Pompei. There may be some in the late Second, or period of the Republic; but they are small, and perhaps only intended as an adjunct to the decoration of a wide border, such as that in VI, 11, 10, which is the Casa del Laberinto.

Of the existence of the Third and delicate style of the First Emperors, about A.D. 1-50, critics who are unacquainted with August Mau's *Geschichte der Decorativen Wandmalerei in Pompeji* seem to be totally unaware on account of the neglected state into which those walls have fallen, and the fact that professional photographers have not taken the trouble to photograph them; although, when closely looked into, they are seen to be far more delicately painted than those whose decorations are so widely known under the appellation of Pompeian art. The Third style contains several portraits, but they are, however, all enclosed in square or oblong borders, which have the effect of frames; but they are never round. One of the earliest of these is in the house of Marcus Epidius Sabinus, IX, 1, 22, in the *exedra* beyond the *peristylum*; the immediate broad border, painted a brown maroon, is not that of the Third style, but it may have been freshly painted over at a later period, for the picture has evidently been inserted; possibly it may have been cut out after the first earthquake in A.D. 63, and put aside till the house was restored, when it was replaced in the same wall; but this being executed by a painter of the Fourth period, the border was painted in the style to which he was accustomed, and probably also not with the precise shade of pigments that were in use at an earlier date. The surrounding decorations are, however, of the "Egyptian" variety of the Third style. The picture is 34c^{ms} high by 39c^{ms} wide, outside which, left and right, is a white border on which are "Egyptian" style marks; beyond which again is another

broad border of green. The background is blue, and on it are two figures, nude to the waist. The figure on the left in the picture holds over his shoulder a thyrsus in his left hand; from the upper end depends a ribbon; in his right hand he holds up in front of the young woman a drinking horn. The woman is slightly behind his right shoulder. The whole picture is not very distinct, but we think that the lines round her neck that appear like a chain are really the top of a light transparent tunic; her



IX. 5. 18.

PORTRAITS FROM POMPEI.
REGIO IX. INSULA V. HOUSE 18.

breasts are visible through it; her hair is chestnut and decorated with vine leaves; in each ear is a pearl. Her left hand is behind his neck, which is curious, as the hand of the furthest figure in the next portrait of the Third style is in the same position. A later one of these which we show here is in an *exedra* in IX, 5, 18, within an *æcus*, and high up in the frieze in a small white panel, surrounded by a border of the Third style, again margined on two sides by a broad red border; the whole is to one side

of a blue panel containing a nude figure, on the other side of which was another portrait. It is a large rectangle about a foot and a-half high by one wide, containing at its lower end the portraits of two women: the colouring is very delicate. One woman is in a violet, the other in a green, robe: the first has hair parted in the centre, and leaves arranged behind it; the shoulders farthest from the spectator seem lost in each other. In the top of the panel is a round ornament which was unnecessary to reproduce in this copy.

Two other double portraits of the Third style are in the *tablinum* of V, 1, 26, the house of Cecilius Jucundus; they are set in the midst of very rich decoration of the Egyptian variety, with red panels, and minute ornamentations, amidst which are painted columns whose sides bristle with points like the leaves of the artichoke: golden and many rich colours make this wall very brilliant.

The great mass of the portraits are to be found in the Fourth style. But it is remarkable that very few, if any, are to be found in its latest variety. This may be owing to the advance of portrait painting on wood, or the possibility that the portraits were mounted on easels and not inserted in the walls, or that they were in the upper instead of the lower floors. The former seems, however, the most plausible reason; and as pictures of easels have been found, it is quite possible that they were used to hold portraits. Most of the portraits have been inserted after having been painted on an easel, or horizontal surfaces. This is only natural, as there would be more care taken in their execution than in the decoration of the wall, into the large plain panels of which many of the medallions are found to have been inserted.

Two of the early portraits of the Fourth style are those in a small house in a narrow street which might be numbered IX, 6^b, third house from the *Strada di Abbondanza*, near the edge of the unexcavated land where stands the farmhouse of the *Barone d'Aquila*; the house has a very black looking-glass in one of its walls. On white painted walls are two medallions in an *æcus* on the left of the *atrium*. Vine leaves, delicately painted blue and green, form their borders; at the top is a sort of coronet in yellow. They are about 20c^{ms} in diameter, and their back-

ground is also white. No. 2 represents the head and shoulders of a woman with vine leaves and a gold fillet (painted yellow) round the head; her dark hair falls in curls over her shoulders. Her crimson robe is attached on both shoulders by a gold buckle, and resting against her right shoulder are two spears, which she is evidently holding. The woman in the other portrait is similarly holding a whip. Both pictures are very primitive but interesting, and they probably represent circus riders; the whip and head-dress of the latter and the spears of the first, together with the looking-glass in the *atrium*, point to some theatrical occupation.

Some of the first attempts at portraits, or those belonging to poor people, are merely in very small medallions six or seven inches across, painted in a red *chiaroscuro*, rough, and almost bordering on mere outline.

Amongst the earlier portraits of the Fourth style in partial red *chiaroscuro*, in which a few other blending colours are introduced, are seven, in the second small *cubiculum* on the right of the *atrium* in the house of Holconius, VIII, 4, 4. There are many fine pictures in this house. There are portraits, quite destroyed, in the furthest left-hand *œcus* beyond the *peristylum*; also in the second *cubiculum* on the left of the *atrium*; but in that on the right are those which Dyer, in his *Pompeii*, described as follows, and the reference to which I take out of *Facts about Pompeii*, in the note at page 17: "In each compartment are eight small pictures [he means to say that in each of eight compartments there is a small picture], representing the heads and busts of Bacchic personages, in a very good state of preservation. On the left is Bacchus crowned with ivy, his head covered with the mitra—a sort of veil of fine texture which descends upon his left shoulder. This ornament, as well as the cast of his features, reveals the half feminine nature of the deity. Opposite to him is the picture of Ariadne, also crowned with ivy, clothed in a green chiton and a violet himation. She presses to her bosom the infant Bacchus, crowned with the eternal ivy, and bearing in his hand the thyrsus. Then follow Bacchic or Panic figures, some conversing, some drinking together, some moving apparently in the mazes of the dance. Paris, with the Phrygian cap and

crook, seems to preside over this voluptuous scene, and to listen to a little cupid seated on his shoulder." All this is so thoroughly and innocently English, even out-doing the simple classic names that Fiorelli gave to these little pictures, which consist merely of the head and shoulders of people that, according to Dyer, "are moving in the mazes of the dance," that its style is really worthy of being adapted to some modern subject as a parody. The characters represented are all that they say (except



PORTRAITS FROM POMPEI.
REGIO VIII. INSULA IV. HOUSE 4. NO. 1.

those that they cannot name); but this over-classicalness of diction has led them to ignore that when the gods, heroes, and others are reproduced in the pictures of Pompei, they are always represented in conjunction with the performance of some act in their history or in the lives of those with whom mythology relates that they were associated. The faces figuring in the seven (not eight) little pictures in question represent no definite act or

event, though they possess several symbolic adjuncts, such as the ivy and the thyrsus. Nothing more likely, then, can be their history than that they were portraits of a family who wished to see their likenesses reproduced as Bacchic characters. We reproduce the woman and her representative of a child, too out of proportion for modern requirements; and we also show the so-called "Paris," which is a woman, as can be seen by the pearl earrings, the hair hanging down the back, and the cupid looking



PORTRAIT FROM POMPEI.
REGIO IX. INSULA II. HOUSE 16.

over the shoulder, which is in the portraits of all those women who appear to have been married. As for the staff and cap, they were probably assumed by the young lady for the sake of effect.

Another early and rough portrait in chiaroscuro is in IX, 2, 16, and represents one holding in each hand a bronze flute, such as is to be seen in the ancient pictures and mosaics, with both mouthpieces in the mouth at the

same time : here, however, he is holding the two portions apart. He is extraordinarily dark, almost copper-coloured, as if of Asiatic origin, and his eyes are very small, while his cheek bones are prominently high. This is an interesting portrait, as a proof of the blood possibly infused into ancient Pompei and Italy.

The portrait of Paquius Proculus and his wife is so well known and so unmistakable that it does not need special illustration here ; but I would quote the lines from p. 323 of Girard's *La Peinture Antique*, suggestive of far greater import than may at first appear even to the student of racial emigration : "*Ce type plutôt africain que romain, ces traits vulgaires où se lisent la ténacité ont été finement rendus par le peintre, qui en a fait une physionomie bien vivante et bien personnelle.*" But in his house there are also other portraits in round medallions, and there are two together on the same wall which have a remarkable resemblance : No. 2 represents a girl with auburn curly hair, gold earrings, and a green robe ; the upper part of her face especially is like that of the boy, No. 1, who is in profile : over his left shoulder and across his chest and body is a crimson robe fastened on the right shoulder by a buckle ; the right arm is bare, and a staff rests against it as if held by his hand that is out of sight. The likeness between these two is such that one is led to regard them as the portraits of a brother and sister ; the upper part of the face, the eyebrows, and the nose, are very similar, and their being in the same room points to the same conclusion. These medallions, like many others, were inserted in the wall, but they do not look like those of the Third period ; and most probably, like many another, may have been preserved after the first earthquake in A.D. 63, and replaced in the walls of the house when again restored to a habitable condition.

Amongst several portraits representing the owners in the character of a god or goddess may be mentioned those in the *atrium* of V, 1, 18. Two of them are fairly distinct : a youth as Mercury ; and another, reproduced as Mars ; he wears a helmet and a shield, and a medal or buckle is visible on his tunic.

But it is curious to note that, though these have probably been passed over as sketches representing gods, the house

was not named after either them or the gods; yet in another instance, in the house of M. Caesius Blandus, VII, 1, 40, in whose *atrium* there is a large medallion, 49c^{ms} in diameter, the house had been fictitiously named that of "Mars and Venus," owing to the portrait representing a soldier and a beautiful woman. That was the limit of the knowledge of the early excavators. The officer evidently had his portrait, and that of his wife, taken as they were, without assuming any character; it had evidently been sufficient for him that he was already a soldier; only a long staff, a strap over his right shoulder, and perhaps the handle of a sword show what his profession may have been; he had not cared to be dressed up as Mars or any other fictitious character. Yet this soldier was not in his armour; and in spite of inscriptions being found in various parts of the house pointing to the fact that the owner was a centurion of the name of M. Caesius Blandus, yet they had not got the sense to name it "The house of the Centurion"; far less to recognise any connection between a large round medallion and the proprietor and his wife; yet those early excavators had recognised a portrait in the picture of Paquius Proculus because it was painted on the wall in the oblong rectangular form common to our day.

In the house of Marcus Lucretius, IX, 3, 3, there is another instance of the portrait in character; in the second room, left of the *atrium*, the third picture shows a lady with a gold coronet on her head, a veil hanging on either side and probably at the back of her head, and large pearls in her ears, while her hair hangs down in curls on either side of her neck. Her dress is greenish-blue. To her left, and partly in front of her, is a child whose left arm stretches across the front of the picture, while his hand holds up over her right shoulder a red fan, made out of a sort of palm. The colours of this portrait are natural, but the expression is that of a Medea; her gaze is haughty and excited: it was the type of the wife of Jason in which this imperious woman desired to be perpetuated to her family and future generations.

Memories of Spanish and Italian lands steal o'er us as we look at the portrait from the *tablinum* of VI, 5, 3; No. 2. It is a medallion 31c^{ms} across, and executed in a

chiaroscuro of maroon colouring. The head and shoulders of a woman, nude, her breasts just visible, and her right arm raised in a graceful curve, the hand holding some object above her head; the arm seems to partly enfold the head of a man behind her right shoulder. And as if in contrast to her fair face and breasts, he is painted very dark, like an Italian whose ancestors, as well as himself, have been much exposed to the sun's rays; his eyes speak ardently; his lips are opened as their cheeks touch. The picture is full of the passionate life of the south.



PORTRAIT FROM POMPEI.
REGIO VIII. INSULA V. HOUSE 39. No. 1.

In the fine portraits from an *æcus* in the small house, VIII, 5, 39, we probably see before us the portraits of two sisters. The medallions, painted on yellow panels in the plain decoration of the walls, are 23 to 24^{cms} in diameter and enclosed by a black wreath of box leaves, one of which is greenish. The background is either yellowish, or toned. No. 1, the eldest sister, shows a lady with a pleasing and distinguished expression; one would almost

say that she had been a *grande dame* in Pompei. She is represented *décolletée*, her shoulders clothed in a light greenish robe, her hair in little curls over her forehead and hiding her ears in their thick clusters and descending down the back of her neck, while round her head is a fillet of gold; in the right ear is visible a gold ring ending in a little gold ball. The mouth in this portrait seems to have been painted out of place, or this effect may be produced by the loss of layers of paint that had formed the lights and shadows on the lower part of the face; but Monsieur Gusman has copied the original faithfully. No. 2 shows a younger lady, "a pretty woman as was ever seen," something like the other; she also is *décolletée*, and her pink robe is held up on her shoulder by a silver buckle; the open part of the robe descends to a point in front. Her hair appears much curled and very thick, and descends over her ears and down the back of her neck and over her right shoulder. Her expression is pleasing, and also rather distinguished.

In V, 1, 26, the house of Cecilius Jucundus, besides two splendid double portraits of the Third style in the *tablinum*, there are, in an *œcus* on the left-hand side of the *peristylum*, three large portraits. The medallion, which is 53^{cms} in diameter, is encircled by a wreath of box painted on yellow panels, which enclose a large Fourth style border on three sides, and some architecture on the other; in a chiaroscuro of red on a pale neutral ground are painted the head and shoulders of a woman, holding a two-handled vase. A fillet of gold is round her head, her right shoulder and arm are bare, her dress is loose, and she wears it round her left arm and shoulder; her hair is curled in lines, and descends the back of her neck in curls. Her earrings are of coral, formed of three balls and a long pendant. Though the right shoulder seems out of shape, her expression is pleasing and dignified. No. 1, in the same *œcus*, has a soft melancholy expression, "Heart on her lips and soul within her eyes." In each ear is a large pearl; the right hand seems to be upholding the stuff of her dress.

In VII, 12, 26, there are much more ordinary types: No. 4 is that of a young lady about twenty. Her expres

sion is pensive and pleasing; her dark chestnut hair is covered with a gold net attached to a gold fillet above her forehead. In her ears are gold rings, and her dress is bluish-green; to her lips she holds a stylus, and probably, lower down in the worn-away part of the picture, there are tablets. This picture reminds us of one found in Herculaneum, and now in the Naples Museum, and reproduced in *Facts about Pompei*. I may relate here that in cleaning up the portraits throughout Pompei, with a solution of benzine and beeswax, I had to be very careful not to destroy the surface as did the official restorer and copier of paintings employed about the place, whose carelessness was unknown to his superiors; but when I came to this picture I found that the nose had been raised up and undermined by half a dozen small cone-shaped snails, that do infinite damage in the fresco work. I saw that a few more rains would sweep it away, so I made a cement of stucco, gum arabic, fish cement, and chalk powdered together into a thick glutinous paste; then I removed the nose, scraped out the snails, inserted my cement, and replaced the nose level with the rest of the picture; then I cleaned and polished the whole portrait. Later on I told the Directors how I had mended the young lady's nose, and they immediately said that if I had told them they would have sent the restorer of paintings to her at once, and begged to know where was to be found this charming young damsel whom I had so successfully rejuvenated. I however made them promise not to send their restorer of paintings, and then gave them the address of the house on condition that they left the portraits alone. They expressed a wish that I would clean all the pictures, large and small, throughout Pompei; they said it would save them great expense. I thanked them.

In IX, 5, 11, are some beautiful little portraits about 22^{cms}. in diameter, one of which is reproduced in my work published in 1895, another being worthy of note as showing in the same frame the face both in profile and in full view: at least, I believe that may be the meaning of the picture. Wreaths are on both heads; and also from the size and shape of the chin it is more likely to be this than the figure of a brother or slave. The type is very Greek, though the lower part of the face in the

profile might be said to have some characteristics of a high caste Egyptian.

From the house of Herenuleus, VI, 7, 23, *Casa di Apollo*, in the *tablinum*, we produce the portraits of two ladies painted about the very end of the last style. No. 1 is very delicately executed and finished, and represents a lady's head. A cupid behind her left shoulder indicates that she was a married woman. Her hair hangs in rings on either side of her head; her gold earrings are fleur-de-lys reversed, and ending in a little pearl. In her hair is the head of a gold pin, terminating in five little gold balls. Her expression is sweet and dignified; her coiffure much that of the French Imperial epoch. No. 3 is not so well executed, and the lady is of a more ordinary type. Her eyes are hazel, and her hair hangs in two or three long rings by her neck; a light veil is thrown over her head, and descends on either side. In her ears are two large pearls. The background is blue, and her shoulders are clothed in a violet robe.

In I, 2, 3, No. 4, another portrait 33c^{ms} in diameter, with a border of green box, shows a woman, behind whose right shoulder is a man. Behind him is a piece of furniture with a vase upon it. She wears a light transparent tunic showing the breasts; over the shoulders is a robe; two green reeds lean against her left shoulder; but what seems very curious is the jockey-like cap with a chin-strap that she appears to have been wearing. Could she have possibly appropriated her lover's or husband's hat in the free-fashion of a New Woman? The idea is so involved that I hastily drop the subject, and merely refer to the very dark colour of the man. No. 5 in this room shows a woman with another variety of head-dress—a sort of knotted plait round the upper part of the *chevelure*.

The head of the child of four or five years old, from the house of Siricus, VII, 1, 47, is in a small room to the right of the garden. The walls are white and simple; the painting is in chiaroscuro of maroon red, and is an excellent portrait of an ugly infant, who was evidently well fattened and had not yet had his ears properly pressed into position. No one, however pedantic, could mistake this for a young divinity, or a pointed-eared faun.



1
PORTRAIT FROM POMPEI.
REGIO VII. INSULA I. HOUSE 47.



1
PORTRAITS FROM POMPEI.
REGIO IX. INSULA I. HOUSE 7. No. 2.

Two medallions in brilliant but natural tints come from a wall on which is almost the last variety of the Fourth style: No. 2 is 31c^{ms} in diameter, and enclosed in a broad red border, edged by a yellow wreath-like corn, and with a thin yellow line inside. It contains an old man with a beard, rather stout; his neck is open, but his shoulders are clothed. Round his head is a mass of vine leaves. A face behind his left shoulder was evidently removed in ancient times, and a plain piece of cement inserted in its place, and coloured red. With the picture of this fine old fellow dressed in his festal Bacchanalian robes, we will draw to a close.

The pictures that have been sufficiently perfect to copy number about fifty-one, and the collection is unique and beautiful, each one being the full size of the original portrait. Some of them bring before our eyes the fair faces of graceful dames and charming maidens; others show us what the men of that comparatively rougher period were like, most of them tanned from exposure to the sun; and some of them show characteristics of the races of Egypt and India, while frequently we have those interesting touches that are the history of the world—a pair of lovers, some fair, some dark, some wealthy, others poor, and

“From the rich peasant cheek of ruddy bronze,
And large black eyes that flash on you a valley
Of rays that say a thousand things at once,”

to the dame of high rank and fortune, we see that the race, taken as a whole, must then have been less refined than in these latter centuries, and more akin to the present middle classes and the swarthy families living on these southern and volcanic vineyards.

THE ANTIQUITIES OF ARLES.

By BUNNELL LEWIS, M.A., F.S.A.

Arles is the subject of my Paper, but a person who has frequently visited the South of France can hardly dissociate it in his own mind from Nîmes; nor is it desirable to do so, for these two cities present several points of resemblance and difference, suggesting trains of thought that may be interesting and instructive. They are in adjoining Departments—Nîmes in Gard, and Arles in Bouches-du-Rhône—and by railway the traveller passes quickly from one to the other.¹ Both possess vast amphitheatres towering above modern constructions, and exceeding all edifices of the same kind on Gallic soil.² But while Nîmes has the Maison Carrée and the so-called Temple of Diana, Arles has no building left that was consecrated to pagan deities. Augustus founded the Roman colony at Nîmes; it was visited by his minister Agrippa, and patronized by the Emperor Hadrian. Arles attained the zenith of prosperity at a comparatively late period, when Constantine fixed his residence there; and became the capital of the Western Empire, when Trèves was dangerous on account of its proximity to the Germans.

Nîmes has few Christian antiquities, no inscriptions of this class found there being earlier than the sixth century.

¹ Strabo, Lib. IV, Cap. I, § 12, p. 186 (edit. Didot, p. 155) Μητρόπολις ἐῖ τῶν Ἀρηκομισκῶν ἐπὶ Νέμανσος, κατὰ μὲν τὸν ἀλλότριον ὄχλον καὶ τὸν ἐμπορικὸν πολὺ Νάρβοντος λιτομένη, κατὰ δὲ τὸν πολιτικὸν ἐπεβάλλουσα. . . ἔρπται ἐ' ἡ πόλις κατὰ τὴν ὁδὸν τὴν ἐκ τῆς Ἰβηρίας εἰς τὴν Ἰταλίαν . . . ἔχει ἐ' ἡ Νέμανσος τὸν μὲν Ῥοῦανὸν περὶ ἑκατὸν σταδίους. This road passed through Narbo (Narbonne) and Arelate (Arles). With Strabo's definition of the site compare the *Antonine Itinerary*, p. 386 sq., edit. Wesseling; p. 186 sq., edit. Parthey and Pinder. "A Mediolano (Milan) Vapineo (Gap) trans Alpes Cottias. . . Inde ad Gallieum ad leg. VII geminam. Cavellione (Cavaillon) mpm XXII

Arelate . . . mpm XXX
Nemausum (*sic*) . . . mpm XVIII
ibid., p. 396 (190).

Ptolemy, *Geographia*, II, x. 6, p. 241, edit. Car. Müller, Gallia Narbonensis, Μετὰ ἐκ τούτους μέχρι τοῦ Ῥοῦανὸν ποταμοῦ Ὀυέλκαι οἱ Ἀρηκόμοιοι, ὧν πόλις μεσόγειοι Ουινδόμαχος, Νέμανσον κολωνία; see Müller's note.

Pliny, *Nat. Hist.*, Lib. III, Cap. IV, Sect. 5, § 37, "Nemausum Arecomi-corum, oppida vero ignobilia. . . XXIV Nemausiensibus attributa."

² The dimensions of the amphitheatre at Nîmes are: greater axis, 133 mètres 38 centimètres; lesser axis, 101 mètres 40 centimètres—being less than those at Arles.

Arles, on the other hand, can show a series of sarcophagi not inferior in interest to the collection at the Lateran: the epigraphs, according to the most competent authority, date from the third century. If we descend to later times, we again perceive a wide difference. The Nimois embraced the Reformed faith about the year 1550; that their successors have not degenerated any one who attends the services of the *Grand Temple* may find out for himself.¹ Arles can hardly be said to have taken part in the so-called wars of religion, and at the present day the Protestants are an insignificant minority.

The principal monuments at Arles are the amphitheatre, theatre and Cathedral. They cannot be omitted in an account of the antiquities of the city, but I do not propose to discuss them at length, partly because they are described in ordinary guide-books, and still more fully by Estrangin²; partly because I had rather direct your attention to objects not so generally known, and concerning which information is not so easily accessible.

By its stupendous size and great solidity the amphitheatre makes a deep impression on the visitor, especially if he views it from the suburb of Trinquetaille, on the right bank of the Rhône—contrasting with the modern

¹ Among the Protestants born at Nîmes the most celebrated are Saurin, distinguished as a pulpit orator, who had the singular title of Preacher to the nobility at the Hague, and in our own time Guizot, the statesman and historian.

Nîmes for a long time flourished, and became an important manufacturing centre; but in the early part of the present century its prosperity was interrupted by a cruel persecution, when the Protestants suffered from the attacks of Royalist mobs. Their excesses may be read in Joanne's *Guide for Provence*, &c., p. 118 sq., edit. 1877; it contains a long extract from Vaulabelle, *Histoire des deux Restaurations*. The Duc d'Angoulême, though the rioters were of his own party, put an end to "these abominable scenes," and said: "Il faut laisser agir les lois contre les assassins et les incendiaires," setting a good example which on many occasions we should have done well to imitate.

² Monsieur Jean-Julien Estrangin published two books, of which the titles are as follow:—*Études Archéologiques,*

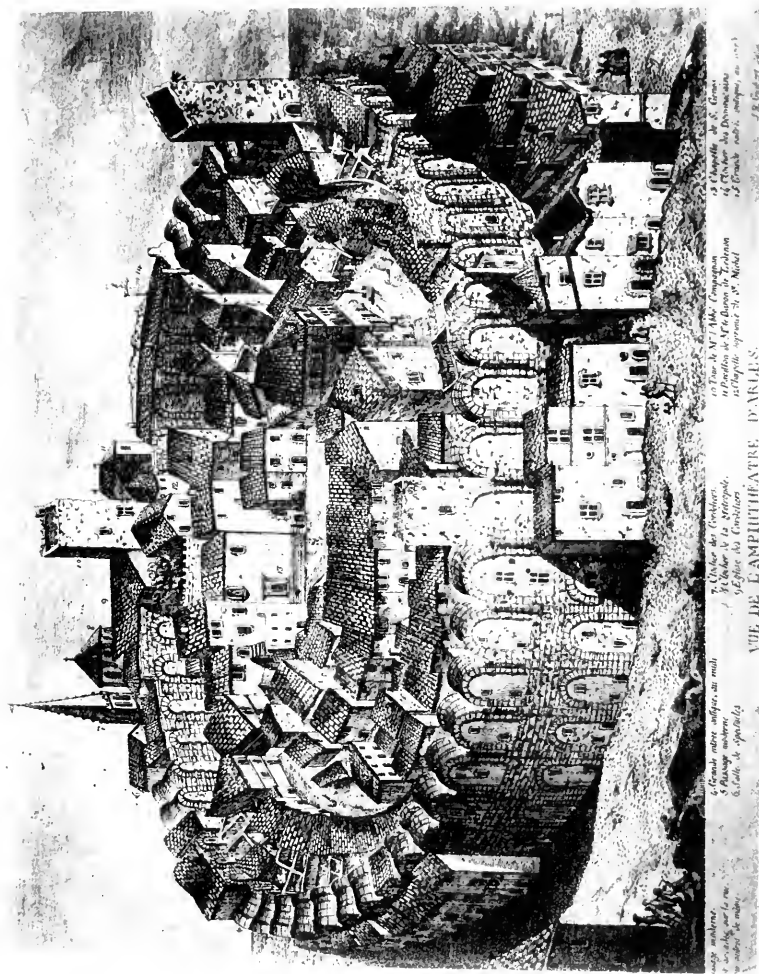
Historiques, et Statistiques sur Arles, contenant la description des Monuments Antiques et Modernes, ainsi que des notes sur le territoire, 8vo. pp. 399, Aix, 1838; and *Description de la ville d'Arles antique et moderne, de ses Champs-Élysées et de son Musée Lapidaire, avec une Introduction Historique*, 24mo., pp. 504, Aix et Arles, 1845. I procured the latter with considerable delay and difficulty; but it is important to any one who wishes to make a serious study of this region, because it contains some details not included in the former work, especially notices of antiquities discovered subsequently to 1838, and a greater number of inscriptions. The historical introduction is also more fully developed. Hirschfeld, in the Vol. XII of the *Corpus Inscriptionum Latinarum*, devoted to Gallia Narbonensis, mentions both these books as authorities for Arles, and frequently refers to them in his explanatory notes: *vide* p. 87, No. XXVII, s.v. Arelate. *Ibid.*, he pays a just tribute to the learning and industry of the publications of Monsieur Marius Huard, the local antiquary.

houses that surround it, and seeming as if it still claimed for its builders a superiority over later generations. The greater axis of this structure, elliptical in form, measures 140 mètres, and the lesser 103. It consists of two storeys—the lower of the Doric order, the upper of the Corinthian; and the benches would accommodate 25,000 spectators. Ammianus Marcellinus records that Constantius II. in 353 A.D., when he was spending the winter at Arles, exhibited games with great magnificence;¹ and Sidonius Apollinaris bears a similar testimony to the Emperor Majorian.² Four rectangular towers were raised at the Cardinal points towards the close of the eighth century, three of which still remain and form a conspicuous feature. Some authors have attributed them to the Saracens, but the French are too ready to father upon the Mussulmans the works of other hands which they cannot explain satisfactorily; in the present instance the supposition is plausible, because the Saracens not only ravaged the South of France, but also made Arles for some time their head-quarters.³ In some other cases such a notion is hardly more rational than the superstition that calls a Roman boundary-wall a *Teufelsmauer*, or sees in a hollow amid the summits of mountains a “Devil’s punch-bowl.”

After the battle in which Charles Martel defeated the Saracens between Poitiers and Tours, they retraced their course; and, as if to avenge their disaster, devastated Languedoc and Provence with fire and sword. Their General, Joussouf, had possession of Arles for four years. Charles Martel descended the Rhône, and compelled the invaders to retreat to Narbonne. The Arlésiens came back to their city; but they could only occupy the site, wholly incapable as they were of restoring the architectural splendour that formerly adorned it. At this period the amphitheatre was given up to the population; the arena, seats, vomitories, and galleries were covered with habitations, as at Nîmes. Two hundred and twelve

¹ Estrangin, *Études sur Arles*, p. 18, cites Ammianus, Lib. 14, Cap. V, Sect. 1, “post theatrales ludos atque circenses, ambizioso editos apparatu” — edit. Bipont, p. 13; edit. Eyssenhardt, p. 9.
² *Sidonius Apollin. Epist.* I, 11, edit. Baret, pp. 200–207, esp. 203.

³ So at Clermont in the Auvergne a Roman wall is popularly called *mur des Sarrasins*. As an illustration of the Arab occupation I may refer to an inscription in that language copied by A.-L. Millin, *Voyage dans les Départemens du Midi*, Atlas 4to., Plate XLIX.



AMPHITHEATRE AT ARLES, FROM AN OLD PRINT.

houses were built there, and even a chapel dedicated to Saint Genès.¹ The demolition of these buildings was begun in 1809, and continued for several years. The amphitheatre abutting on the old Roman ramparts, and projecting like an engaged column, presented itself to these helpless people at the same time as a strong fortress and a secure dwelling-place. Most probably under these circumstances the towers were erected by the Arlésiens with the view of strengthening their position against Mussulman enemies. Nor do these precautions appear unnecessary when we consider how many sieges they had to sustain for nearly a century and a-half, and how little aid the French monarchy could afford them.²

The Theatre is situated south-west of the Amphitheatre, and very near it. At Arles it is a great advantage that the most interesting antiquities, as at Vienne, are concentrated in the town, and almost adjoin each other—so close is their proximity; the traveller can visit them all in a short walk, and there is little to be seen in the neighbourhood. But scanty remains are left of this once magnificent and richly decorated edifice, which owes its ruined condition partly to Christian zeal, for the clergy regarded it as a school of vice and temple of idolatry: accordingly, St. Hilary, Bishop of Arles, A.D. 429–449, stripped the building of its finest marbles and removed them to churches.³ In the work of destruction he was

¹ I exhibited a photograph of a folding plate that accompanies the *Abrégé Chronologique de l'histoire d'Arles*, contenant Les Événemens arrivés pendant qu'elle a été tour-à-tour Royaume et République, ensuite réunie à la Souveraineté des Comtes de Provence et des Rois de France. Ouvrage enrichi du Recueil complet des Inscriptions et de Planches des Monumens antiques. Par Monsieur De Noble Lalauzière, 1808. Planche X, Vue de l'amphithéâtre d'Arles, with indications at foot, amongst them "No. 12, Chapelle supprimée de St. Michel; No. 13, Chapelle de St. Genès."

This work comprises the history of Arles from the foundation of the city to the death of Louis XIV, whom the author describes as "un héros véritablement Chrétien!" Lalauzière should be consulted for details, but he does not rise above the level of annalists; he is not a philosophical writer who groups

facts and personages with insight into motives and due regard to the connection of cause and effect.

² The unification of France, the results of which are so remarkable at the present day, was a slow process. For a long period it was prevented by the power of great nobles, such as the Dukes of Normandy and the Counts of Provence, who ruled extensive territories; and the English had no small portion of the country, retaining Bordeaux for nearly three hundred years. Louis XI consolidated the royal power, and Richelieu completed his work, when he took Rochelle—a success which caused the downfall of the Huguenots as a political party.

³ According to some accounts his zeal went even further. "Il fit même briser les belles statues qui en faisoient l'ornement, et eut soin de les faire cacher bien avant dans la terre, pour ôter à

aided by the deacon Cyril; when the latter suffered some wound in the course of these operations (*dum marmorum crustas et theatri proscenia deponeret*) he is said to have been miraculously cured. To make bad worse, at least from the archæological point of view, a nummery was installed here in 1664; but it disappeared in the last century—I presume, during the disorder consequent on the great Revolution.

The architects of this theatre seem to have followed Greek rather than Roman models in the choice of its position as well as in details of arrangement, for the seats were placed on the declivity of a rock, and thus, to a great extent, the cost of substructions was saved. Two lofty Corinthian columns, which, though injured by fire, stand upright with the entablature over them, are at present the most conspicuous objects here; in fact, they alone arrest attention at first sight. Of the rest which were in the same row behind the proscenium, where the actors performed, nothing is left but the pedestals. What we desiderate here is supplied by a line of columns at Taormina (Taur-omenium), where the spectator, while he saw and heard the drama, could at the same time feast his eyes with a prospect not to be surpassed in all the globe, comprehending the summit of Etna and the east coast of Sicily even beyond Syracuse.¹ These theatres furnish us with an artistic commentary on Virgil's beautiful lines (*Æneid*, Lib. I, v. 431 *sqq.*):

Hic portus alii effodiunt; hic alta theatris
Fundamenta locant alii, immanesque columnas
Rupibus excidunt, scenis decora alta futuris.

The poet is describing the Tyrian colonists busy in erect-

l'idolâtrie tout prétexte de retour"; Lalauzière, *op. citat.*, p. 62.

See his Epitaph on a sarcophagus: *ibid.* at the end of the volume in the *Recueil des Inscriptions*, No. 151, p. xx. It begins with the word *Antistes*, the ecclesiastical Latin for Bishop, and consists of sixteen lines, all hexameters except the fifth, which is a pentameter:

Hic carnis spoliū liquit *ad astra*
volans.

A leaf is placed at the end of each verse.

See also *Corp. Inscr. Lat.*, vol. *citat.*, p. 122, No. 949. On the cover of the sarcophagus, now in the Museum at Arles,

we read ANTESTIS (*sic*) HILARIVS. In v. 14 the word *flagrantia* occurs which does not suit the context:

Divitias, paradise, tuas, flagrantia
semper
Gramina et halantes divinis floribus
hortos.

Hence the conjecture *fragrantia* has been proposed. Comp. Estrangin, *Études*, p. 136; Description, p. 209.

¹ Seriadifalco, *Antichità di Sicilia*, Palermo, 1834-42, Vol. V, Tavola XXII. Hittorff and Zanth, *Architectur Antique de la Sicile*, Paris, 1870.

ing the walls and public buildings of Carthage. Thus by comparing one monument with another are we enabled to sketch the outline, to fill in the deficient parts, and to picture to ourselves the grandeur and beauty of the whole.

Another feature, though not prominent, deserves our notice: viz., a deep groove in front of the stage, intended, I think, to receive the curtain (*aulea*) which, contrary to modern usage, was let fall at the beginning of the play, and raised when the performance ended—as Horace says, *Epistles*, Lib. II, v. 189 *sq.*:—

Quattuor aut plures aulea premuntur in horas,
Dum fugiant equitum turmæ peditumque catervæ.

Comp. Cicero, *Epistles ad Familiares* VII, 1.¹

At Taormina the places of honour were marked by Inscriptions for the pontiffs (hierommemones), quæstors, and commissioners for the supply of provisions (præfecti rei frumentariæ); and we cannot doubt that the same custom was adopted at Arles also. That it was general throughout the Roman Empire we may infer from similar epigraphs at Aquincum; I observed them when I made the excursion thither. They have been carefully noted by the Hungarian antiquaries, and some are transcribed in my Paper on Buda-Pest, *Archæological Journal*, Vol. L., p. 330.²

The great number of statues found in the theatre of Arles sufficiently proves the good taste as well as the abundance of its decorations. Moreover, the effigies of Venus, from whom the Julian family traced their descent, and a bust of Augustus that may have belonged to a

¹ This letter is important as a parallel to the passage quoted from Horace, and as showing Cicero's opinion concerning the Stage and Amphitheatre. I extract two of the most remarkable sentences: "Quid enim delectationis habent sexcenti muli in Clytemnestra? aut in Equo Trojano craterarum tria millia? aut armatura varia peditatus et equitatus in aliqua pugna? . . . Sed que potest homini esse polito delectatio, quum aut homo imbecillus a valentissima bestia laniatur, aut preclara bestia venabulo transverberatur?"

² At Trèves a stone has been discovered on which the word LOCUS

appears; at present nothing more remains, but from comparison with other monuments it is evident that originally the name of the occupant was added: Hettner, *Die Römischen Steindenkmäler von Trier*, 1893, p. 9, No. 13 [Saul V.] Sitzplatz mit Inschrift. Aus dem Amphitheater zu Trier. Hettner cites, *C.I.L.*, Vol. XII, No. 711, *locus d(e)cret(o) d(e)curionum* pas[*top*]horor(um), and especially from the amphitheatre at Syracuse, *C.I.L.*, Vol. X, 7130 *locus Statili*, *locus P. Lae* . . . See also Brambach, *Corpus Inscriptionum Rhenanarum*, No. 771d.

colossal figure, lead us to the conclusion that the date of erection should be assigned to his reign or one that followed soon afterwards.¹

An inconsiderate traveller might not discover any connection between the Theatre and the Cathedral of St. Trophime; but it really exists, for the colonnettes of the *podium* were transferred to some other edifice, and afterwards found place in the cloisters of the Metropolitan Church.

According to the traditions of the See, this Trophimus was the same as the disciple of St. Paul mentioned both in the Acts of the Apostles xx, 4, together with Tychicus, as coming from Asia; *ibid.* xxi, 29, as an Ephesian; and in the second Epistle to Timothy iv, 20, as left behind sick at Miletus. We may remark here that the relations subsisting between the South of France and the Orient in Apostolic times continued in the Antonine age, which we know from the Epistle sent by the Christians at Lyons and Vienne to their brethren in Asia Minor.² It is said that Trophimus was First Bishop of Arles, and that from him, as from a fountain, the streams of faith flowed to all parts of Gaul. But Gregory of Tours gives a different account, and brings the date of this saint down to the latter half of the third century. At Mont-Majour, four kilometres north-east of Arles, near the abbey, at the foot of the great tower is a chapel, with two cells hollowed out in the rock, one of which is called the Confessional of St. Trophime. This could not refer to the Trophimus of the New Testament; in the primitive church there was no

¹ K. Bernhard Stark, in his book entitled *Städteleben, Kunst und Alterthum in Frankreich*, 1855, has an interesting chapter on Arles and Nîmes, pp. 67-106, beginning with a comparison between these two cities, considered historically. He describes the prospect seen from the tower of the amphitheatre, and afterwards, p. 74, proceeds to the theatre. "Neben uns ragt die Steinputzpyramide des Rolandthurmes, selbst nur ein Aufbau auf den drei Etagen der Aussenwand des Theaters, und dieses selbst ist blosgelegt mit seinen zwei ragenden Säulen von afrikanischer Breccia und dem wohl erhaltenen unteren Aufbau der Bühnenwand uns zu Füßen."

² The letter is preserved by Eusebius in his *Ecclesiastical History*, Bk. V, Chap. I: my Paper on the "Antiquities of Vienne," *Archæol. Journ.*, Vol. LI, p. 255, and Vol. LII, p. 145 *sq.* The correspondence with Asiatics is only what might be expected, for Provence always turned her face towards the East. We see this attitude alike in the facts recorded by ancient authors, and in the monuments still extant; in the worship of Apollo and Diana at Marseilles; in inscriptions—Phœnician, Arabic, and Greek—not to speak of the Hellenic types and symbols reproduced by the Gaulish tribes from the Alps to the Pyrenees. Stark, *op. citat.*, pp. 40-43 and 63.

such practice, for St. James, v, 16, says, "confess your faults one to another."¹

We should bear in mind that the Cathedral was first dedicated in 606 to St. Stephen, and afterwards, in 1152, to St. Trophimus, when his body was removed to it from the church of St. Honorat at Aliscamps (Champs-Élysées). The most interesting part of the edifice is the grand portal close to the Hôtel de Ville, and opposite the Musée, on the Place Royale, from which one ascends by ten steps, now of stone but formerly of marble. In the centre of the arch our Lord appears seated, bearded and wearing a Carolingian crown, his right hand raised in benediction, his left holding the Gospel. He is surrounded by the usual Evangelistic symbols, derived from the Apocalypse — angel, eagle, lion and bull — both beasts winged; they all carry a gospel, the eagle in its claws, the lion and bull with their fore-feet. Twelve Apostles below are seated, nimbated, with books in their hands. On both sides of the door stand three lofty columns with different capitals—the two sets of capitals corresponding, each to each. They do not belong to the classical orders, but remind us of the Byzantine style, as seen at Constantinople or Ravenna. The saints above mentioned occupy two niches—Trophimus in episcopal robes, with mitre and crosier; Stephen suffering martyrdom by lapidation. Four statues of Apostles fill up the intercolumniations. The large figures are surmounted by a frieze of smaller ones—processions of the blessed where bishops are prominent, and of the wicked dragged down to hell in chains; this latter part of the composition, like the façade at Autun, has been rightly characterised as horrible and grotesque.²

¹ For the excursion to Mont-Majour and some account of the Abbey there, see Joanne's *Guide*, Provence, Alpes Maritimes, Corse, Route 1, p. 53, edit. 1877. The *Congrès Archéologique de France*, XLIII^e Session, à Arles, pp. 632-642, contains a Memoir by M. François de Marin, "Des rapports d'Arles avec l'Abbaye de Montmajour," from the foundation of the monastery in the tenth century to its secularization, ordered in 1876.

² *Congrès Archéologique*, *ibid.*; a still more elaborate Memoir by M. Honoré Clair, "Iconographie du portail de Saint-Trophime," pp. 607-631; "Dans les contrées méridionales de la France l'art byzantin n'a rien accompli de plus calme, de plus lucide dans son ordonnance, de plus luxueux dans ses décorations," p. 608. "Parmi eux (les apôtres) saint Trophime et saint Étienne occupent une place d'honneur due à leur qualité de patrons de l'église. En regard l'un

Of the inscriptions in the Cathedral, one is so touching that I do not like to pass it by unnoticed. The inconsolable widow placed it on the tomb of Robert de Montcalm, who died in 1685 :

D. O. M. ET AMORI CONJUGALI SACRUM.

Mortuus est aliis, at mihi vivit adhuc.

"He's dead to others, still alive to me."

Monsieur Estrangin remarks that the Greek Anthology does not contain an epitaph that expresses a sensibility more profound and more delicate.¹

Next to the portal, the cloisters have the best claim on our attention. They consist of four galleries surrounding a square enclosure, evidently of different periods, some arches being of the twelfth century and round (*en plein cintre*), others of the fourteenth and pointed (*en ogive*); but the architecture may be described generally as Gothic. The capitals of columns present a great variety of subjects relating chiefly to biblical history, mingled with mediæval legends about fabulous animals. One of these is St. Martha muzzling a monster, *la Tarasque*, from which Tarascon (Bouches-du-Rhône), the junction station for Nîmes, is said to derive its name. Joanne's *Guide*, p. 40 *sq.*, edit. 1877, gives a detailed and amusing account of the Fête de la Tarasque. Other creatures of the same kind are called *gaiivres* and *gémusques*. The list of these sculptured scenes is so long that it would be quite impossible to enumerate them all; indeed it would be difficult to find another building where so many events recorded in the Old and New Testaments are represented. A few examples must suffice. We see here the Hebrews encamped on the plains of Moab, and blessed by Balaam from the high places of Baal; which is ascertained from the ass of the

de l'autre, ils personnifient la prédication et le martyre; saint Trophime confessa au péril de ses jours la bonne nouvelle; saint Étienne mourut pour elle," p. 616 *seq.*

The inferior execution of these statues and a difference in the epigraphic characters appear to indicate that they belong to a later date than the others, p. 619. This essay, besides a full discussion of the larger figures, enters into

the details of the subjects on a smaller scale, with which the portal is profusely ornamented, *e.g.*, the Dream of Jacob, the Annunciation, the Nativity, the Adoration of the Magi, the Flight into Egypt, &c.

¹ *Études sur Arles*, p. 178. Many Inscriptions will also be found in the *Description de la Ville d'Arles* by the same author, Sect. 7, Église Métropolitaine, pp. 75-102.

prophet, and a tower inscribed ISRAEL. A pillar supporting saints, one of whom is distinguished by sandals and a wallet, symbolizes the mendicant orders. A man, over whom PAVLVS is written, holds an open book, and is surrounded by a group of listening old men, doubtless with reference to the Apostle preaching at Athens before the venerable Areopagus (Acts xvii). The martyrdom of St. Stephen is repeated several times, because he was the patron Saint of the Church. On some of the statues traces of paint are still perceptible. The bénitier, or vessel for holy water, has been formed by turning upside down and scooping out the base of an ancient column, which was probably removed from the theatre.¹

In one of the four arcades the subjects are not taken from the Bible, but from ecclesiastical history, especially that pertaining to monastic orders. Here we have confessors in chains, executioners armed with clubs or other instruments of torture, martyrs hanged or with cords round their necks, a bishop giving them benediction, and the hand of God extended towards them.²

Before describing in detail any of the Sarcophagi at Arles, it may be well to make, by way of preface, a few remarks on the word itself, and the use of the thing in pagan antiquity. Sarcophagus (*σαρκοφάγος*) literally means *flesh-eating*, and was applied to a kind of limestone

¹ In 1793 the basilica was transformed into a Temple of Reason. At this period it suffered, like many other French churches, many mutilations perpetrated by revolutionary mobs, even more destructive than the Huguenots. Hence we are unable to identify some of the scenes which the sculptures portray.

² The *Congrès Archéol.*, Vol. citat., p. 568, gives only a brief account of the Cloister, being part of the *compte-rendu* of a visit paid to the Cathedral. The author is M. Vêran, architecte de la ville. On the other hand, Estrangin, *Études*, pp. 183-202, supplies an abundance of particulars with almost tedious proximity.

Lenthéric's work—*Les Villes Mortes du Golfe de Lyon, Illiberris, Ruscino, Narbon, Agde, Maguelone, Aiguesmortes, Arles, Les Saintes-Maries*—is a very meritorious performance and of exceptional interest, for the writer possesses qualifications seldom united in the

same person—the lore of an antiquary and the science of a civil engineer. But here, as in many other cases, the title may mislead, and the reader may expect some notice of the buildings at Arles described above. However, his mistake will be corrected if he will only peruse the first paragraph of the Preface, in which the following words occur: "Je veux seulement parler des variations successives de ce littoral depuis les époques historiques les plus éloignées jusqu'à nos jours." Moreover, Arles presents to the visitor a spectacle of traffic and activity, so that it does not deserve to be ranked with the Dead Cities, as Lenthéric himself admits: "Arles avec sa population remuante de plus de vingt-cinq mille âmes, n'est pas une ville morte; mais c'est une reine déchuë," p. 409. The text is accompanied by fifteen maps and plans. The map of the Golfe de Lyon shows the Roman roads, and the names of places both ancient and modern.

remarkable for consuming corpses laid in it, quarried at Assos—a place mentioned in the Acts of the Apostles¹—and well known on account of the discoveries made by recent explorers. Pliny, *Nat. Hist.*, Lib. XXXVI, Cap. XVII, Sect. 161, informs us that within forty days nothing was left but the teeth. Afterwards the term was applied to any coffin,² but especially to those of stone, or marble decorated with reliefs. They became very common in the second century after Christ, and the subjects represented were sometimes scenes from daily life, but more frequently mythological. These receptacles of the dead seem to have been kept ready-made, like any other manufactured article; hence, in many cases, the sculptural designs contained no reference to the profession or acts of the deceased.³ The Etruscan sarcophagi were often of terra-cotta, and a recumbent figure was placed on the cover to adorn them: Micali, folio Atlas of Plates, *Antichi Monumenti*, accompanying the work entitled *L'Italia avanti il dominio dei Romani*, and containing descriptions in the text; see p. 11, Tav. XLII, “Una figura colcata che serviva per coperchio di un’urna”; XLIII is a lady of high rank, wearing a necklace of fine workmanship, like those exhibited in the Gold Ornament Room of the British Museum, far surpassing the efforts of modern jewellers; holding a mirror in her right hand, and a pomegranate in her left; cf. Tav. XLIV.

Many examples of this class of monuments, executed

¹ Assos, Acts, XX, 13, Ἡμεῖς δὲ προελθόντες ἐπὶ τὸ πλοῖον ἀνήχθημεν ἐπὶ τὴν Ἀσσον, ἐκείθεν μέλλοντες ἀναλαμβάνειν τὸν Πάυλον· οὕτως γὰρ ἦν διαταγμένος μέλλων αὐτὸς πεζεύειν.

Conybeare and Howson, *Life and Epistles of St. Paul*, 8vo edition, Vol. II, pp. 258–261, describe the place and the scenery that surrounds the approach to Assos, with an engraving of the gateway, p. 260.

Lübke, *Grundriss der Kunstgeschichte*, Vol. I, p. 115, gives an account of the very ancient and remarkable sculptures in the temple at Assos, “Sie bestehen aus flachen Reliefs, in einem stumpfen an assyrische Denkmäler erinnernden Style, in schwärzlichem Tuffstein ausgeführt. In ununterbrochener Folge den Architrav bedeckend, stehen sie auch durch ihre

Gegenstände.—Kämpfe zwischen Löwe und Stier, Männer beim Trinkgelage, Phantastisches wie die Sphinx, Centauren und Männer mit Fischschwänzen,—der orientalischen Kunst noch näher als der griechischen.

Dr. A. S. Murray, *History of Greek Sculpture*, Vol. I, p. 128, Fig. 26, reliefs from Assos.

² Augustine, *De Civitate Dei*, Bk. XVIII, Chap. 5, referred to by Conybeare and Howson; *loc. citat.* Quia enim arca in qua mortuus ponitur, quod omnes jam σαρκοφάγον vocant, σορός dicitur Greece; &c.

³ Roach Smith, *Roman London*, p. 46. Sir W. Smith's *Dictionary of Greek and Roman Antiquities*, 3rd edition, s.v. Sarcophagus, Vol. II pp. 595–597, figs. 1, 2, 3.

during Pagan times, still remain, whence we perceive that the Christians still retained not only the general arrangement of the groups, but also some subjects and details derived from polytheism.

I add a brief notice of some remarkable sarcophagi:

(1.) From Golgoi (recently identified with Athieno), Cesnola's *Cyprus, its ancient cities, tombs, and temples*, pp. 110–117, description of a sarcophagus and two *stelæ* found with it. Plate X, facing p. 110, full page engraving. At one end the decapitation of the Gorgon by Perseus is represented¹—to which a *biga* corresponds at the other. The longer sides show us scenes from daily life—a banquet, and armed warriors hunting a bull and a boar. The author very reasonably suggests that the sculptor took his design from evenly-balanced groups, such as we see in the pediments of the Temple at Ægina, and that the treatment of individual figures, and of their drapery and armour, also corresponds with the Transition Period. Compare Plates XIV, XV, sides and ends of a large marble sarcophagus from Amathus, facing p. 256. Here we have a procession, apparently part of funeral rites; the fan-shaped ornament on the horses' heads is like those in Egyptian reliefs, Wilkinson, Vol. I, p. 106, Plate I, "Remeses III returning with his Prisoners—

¹ When Perseus beheaded Medusa, Pegasus sprang from her: to this fable Juvenal alludes in *Satire III*, v. 117 *seq.*:

ripa nutritus in illa,
Ad quam Gorgonei delapsa est pinna
caballi.

A true born Grecian! litter'd on the
coast,
Where the Gorgonian hack a pinion
lost.

Gifford's Translation.

The shore mentioned here seems to be the coast of Cilicia, and some have explained the passage as relating to Tarsus, near which city Pegasus is said to have fallen from the air, and broken his foot (*ῥαπσός*, planta pedis). Heinrich has a long note in his edition of *Juvenal*, Vol. II, Erklärung, p. 142 *seq.* We have a good illustration of the poet's words in the coins of Cleanderis in Cilicia, west of Tarsus, and opposite Cyprus—the position corresponding with the phrase, "*ripa in illa*." See the *Numismatic Chronicle* for 1896, Third

Series, No. 61, Paper by Hermann Weber, M.D., pp. 25–27, Plate III, Figs. 3–10; coins 52, 54–57 exhibit the Gorgon's head and Pegasus—well known as Corinthian types. For Tarsus compare Catalogue of Hunter's Collection by Combe. Gifford has translated *caballus* by *hack*; but there is reason to doubt whether the Latin word means an inferior kind of horse, for it has been observed that the derivatives—French *cheval*, and English *chivalry*—point in the opposite direction. See Key's *Latin-English Dictionary*. He considers that the primary signification is one of dignity. So the adjective *caballinus* is applied to the inspiring fountain, Hippocrène, which was produced by the hoof of Pegasus: Perseus, Prologue to *Satires*, v. 1.

Nec fonte labra profui caballino.

Professor Key's Article concludes with the remark that a word is oftener degraded than promoted.

'Thebes'; p. 336, woodcut No. 48, "The Royal Princes in their Chariots." A man standing, who holds a parasol over another seated, is evidently an Oriental motive, as such a group often occurs on Assyrian monuments, where attendance of this kind is reserved exclusively for the monarch: Layard, *Ninereh and its Remains*, 6th edition, Vol. II, pp. 133, 326; Kaulen, *Assyrien und Babylonien*, p. 33, Fig. 14, Friedensschluss; Relief aus Nimrud nach Layard. At one end we see Venus repeated four times, and at the other a figure also quadruple; the latter may be Melicertes (Melkarth, Kenrick's Phœnicia), the Phœnician Hercules, or the Pataici—tutelary deities in the form of pygmies, whom the Phœnicians placed on the prows of their triremes: *Herodotus*, Book III, Chap. 37.¹

(2.) From Patras; we observe here the same symmetry of composition as in the preceding example. In the centre are two Cupids who seem to be drunk, judging from their uncertain posture. At each corner of the front is a Cupid, with a *Lagobolon*; one holds a dish containing fruit, the other a dead hare suspended by its hinder feet. The *lagobolon* is a throw-stick, like a shepherd's crook (*pedum*), but rather shorter and stouter. A coin, engraved by C. O. Müller, *Denkmäler*, Taf. XLII, No. 528, shows it in the hand of Pan, sitting on a rock and playing with a hare: *Archäologische Zeitung*, 1873, fine Plate No. 59, accompanying an excellent article by F. Matz, who makes some general remarks on Greek and Roman sarcophagi, as introductory to the detailed explanation of the one from Patras.

(3.) At Girgenti (Sicily), in the Cathedral of S. Gerlando. It seems to be a Roman copy of a Greek original, which will account for the composition being good, while

¹ Ἔστι γὰρ τῶν Ἠφαίστου τῶγαλμα τοῖσι Φοινικίοισι Παταίοισι ἐμφερέστατον, τοῖς δὲ Φοινικεῖς ἐν τῇσι πρῶρχσι τῶν τριήρων περιάγουσι ὅς ἐκ τούτους μὴ ὀπίωπι, ἐγὼ δὲ οὐ σημανίω πυγμαίου ἀνέρος μικρῆς ἐστι.

See Rawlinson's Translation, Vol. II, p. 434 *seq.* Herodotus here relates outrages committed by Cambyses during his stay in Egypt: *ibid.*, note 9, with two engravings, and notes 1, 2. Various derivations of the word "Pataci" have been proposed by Scaliger, Selden, and Bochart from the Hebrew; but Movers,

Phönizier, Vol. I, p. 653, connects it with the Greek πατάσσω. "The pigmy figures of Pthah-Sokari are often found in Egypt, principally, as might be supposed, about Memphis."

Kenrick, *Egypt of Herodotus*, p. 253, note on Παταίοισι, says that the name may be derived from Phtha, who represented the element of fire, and therefore was identified with Hephestus (Vulcan). This etymology seems more probable than Movers' conjecture. See also note on Ἠφαίστου τὸ ἱπὸν, p. 252.

the execution is inferior. The subject is the myth of Hippolytus, and the reliefs harmonize with the drama of Euripides bearing his name. We see him accompanied by four hunters, striking down a wild boar; Phædra is distracted with love, and maidens playing on the lyre try to soothe her; the nurse brings to Hippolytus the *billet-doux* of his stepmother; in the last scene the unhappy youth, falsely accused, and assailed by a marine monster, appears fallen from his chariot and dragged along the ground by the horses.¹ This monument, which I remember to have seen, though of great merit, is not so well known as some others of the same kind, partly from the remoteness of the locality, partly from the danger that besets the traveller in Sicily.

(4.) In the Vatican Museum, Hall of the Greek Cross, Sarcophagi of St^a. Constantia, daughter of Constantine, and of the Empress St^a. Helena, mother of Constantine. The material is red Egyptian porphyry, and the size is the largest known: for these two reasons no visitor can forget them. Like the contemporary sculptures on the Arch of this Emperor, they show manifestly the feebleness and degradation of art. For a critical estimate of them see Emil Braun, *Ruins and Museums of Rome*, pp. 269–271: “Horsemen hovering in the air, and below them prisoners and corpses scattered around, seem intended to represent a triumphal procession, or even a field of victory.” Compare Lanciani, *Pagan and Christian Rome*, Chap. IV, Imperial Tombs, Section on “Mausolea of Christian Emperors,” pp. 196–199; full page engraving facing p. 198, “Sarcophagus of Helena.” The plate enables the reader to form a correct idea of the sculptures.

(5.) In the basilica of San Lorenzo, a short distance outside the gate of the same name (*Porta Tiburtina*), on the road to Tivoli, there are two sarcophagi marked *a* and *b* in *Murray's Handbook for Rome*, Sect. I, § 24, p. 131, edit. 1864. The bas-reliefs have for their subject, on the former a Roman marriage; on the latter vintage with birds and animals.

(6.) At Lucq en Béarn a sarcophagus described by

¹ Hippolytum rabidi diripuistis equi.
Ovid, *Ar Amatoria*, Bk. I, v. 338.
Baedeker's *Italie Méridionale et la Sicile*. Route 30. Girgenti, p. 275, edit.

1877. Meyer's *Reisebücher*, Unter-Italien und Sicilien, von Dr. Thomas Gsell-Fels, Zweiter Band, p. 418. The latter guide-book supplies more details.

M. Le Blant as "*presque inconnu*." Many years ago I explored it with some difficulty, making the excursion from Oloron (Basses-Pyrénées). The result of my inquiries will be found in a paper on the "South-West of France," *Archæological Journal*, 1879, Vol. XXXVI, pp. 21-23. See Pératé, *L'Archéologie Chrétienne*, p. 299.

(7.) Peperino Sarcophagus of Scipio Barbatus, now in the Belvedere of the Vatican, remarkable for its Inscription in archaic Latin, which has been frequently copied, and for its architectural ornaments, rosettes, triglyphs, dentils, etc.¹: Emil Braun, *op. citat.*, p. 181, and especially Carlo Labruzzi, *Via Appia Illustrata*, Plate No. 7, "Ingresso al Sepolero della Famiglia dei Scipioni scoperto l'anno 1780 col Sarcofago, Iscrizioni e Busti ivi trovati."

(8.) The collection of Christian Sarcophagi in the Lateran Museum is the most important of all, which, however, I need not describe, because *Murray's Handbook* gives a detailed account of it.

No special work on ancient sarcophagi has yet appeared, but I understand that one is being prepared in Germany. At present, the information is dispersed in various publications. C. O. Müller, *Archäologie der Kunst*, Period V, § 206, 2, and Remark; § 207, 5, and Remark (English Translation, pp. 196-199), gives a general account of the subject and some examples. Much information concerning Christian monuments of this class will be found in *L'Archéologie Chrétienne* par André Pératé, pp. 294-329, with illustrations, Figs. 192-222, and Bibliography—General at the beginning of the book, and Special at the head of the principal chapters.

I will only pause for a moment to remark that this class of Antiquities is peculiarly interesting, not only for its connexion with Sacred and Ecclesiastical History, but also as contributing to our knowledge of ancient art—architecture, sculpture, and mosaics. A glance at Seroux d'Agincourt's great work, *The History of Art by its Monuments*, will show that this assertion is not rashly made. In the Plate entitled, "Scelta de più bei monumenti della Scultura antica," a large proportion of the examples are taken from sarcophagi preserved in various museums.

¹ *Orelli Inscriptions*, Vol. I, p. 149, GNAIVOD, i.e. Guaco cum digamma

Acol: VIRTUTEI, i.e. virtute, OMNE LOVCANA, i.e. omnen Lucaniam.

The Christian Sarcophagi are among the most important remains of antiquity preserved at Arles; not so numerous as those in the Lateran Museum at Rome, but equally interesting. It would be impossible within the limits of a paper to describe many; but two or three examples may suffice, at least for the present.

One, of which I exhibit a photograph brought from the place itself, is an excellent specimen—Plate IV in M. Le Blant's admirable work entitled *Étude sur les Sarcophages d'Arles*. We see a group of figures under a portico, supported by twelve Ionic columns spirally fluted, with a pediment at each end. Our Lord occupies the central position on an elevated seat, as in one of the best known Christian tombs, viz., that of Junius Bassus, A.D. 359 (the date being ascertained from the Inscription (SEPT. EVSEBIO ET YPATIO COSS.),¹ in the crypt of St. Peter's, for the plan of which see *Murray's Handbook*, Sect. I, § 24; there our Lord is seated between the chiefs of the Apostles St. Peter and St. Paul: Aringhi, *Roma Subterranea*, Vol. I, p. 276, folio, full page engraving (Sarcophagus ex Vaticano Cœmeterio effossus), which has been often copied, e.g. Lübke, *Grundriss der Kunstgeschichte, Altchristliche Kunst*, Vol. I, p. 252 sq., Figs. 171, 172.

A stool (*scabellum*) beneath His feet indicates a post of honour. Pausanias, *Græciæ Descriptio*, Lib. VIII, c. XXXVII, § 2, Vol. III, p. 412, edit. Siebelis (Arcadia), giving an account of statues that adorned a sacred enclosure near Megalopolis, says that the figures, throne and foot-stool (*ὑπόθημα*) were all of one stone, or monoliths.² Christ is bearded to denote divine majesty, as in

¹ See Chronological Tables of Roman History appended to Smith's *Dictionary of Classical Biography*—23rd year of the reign of Constantius II, when Julian in his fourth campaign crossed the Rhine for the third time.

² Pausanias, *loc. citat.* Ἀντὰ δὲ τὰ ἀγάλματα, Δέσποινα καὶ ἡ Δημήτηρ τε καὶ ὁ θρόνος, ἐν ᾧ καθέζονται, καὶ τὸ ὑπόθημα τὸ ὑπὸ τοῖς ποσίν ἐστιν ἐνὸς ὁμοίως λίθου. Here Δέσποινα is equivalent to Hera (Juno). Ὑπόθημα has the same meaning as ὑποπόδιον in the Septuagint and New Testament, Hebrews i, 13: πρὸς τίνα δὲ τῶν ἀγγέλων ἔιρηκέν περὶ Κάθου ἐκ δεξιῶν μου ἕως ἡν θῶ τοὺς ἐχθροὺς σου ὑποπόδιον τῶν ποδῶν σου.

Beza translates by *scabellum pedum tuorum*.

Scabellum also means a kind of wooden shoe used to beat time and as an accompaniment to musical instruments. Pollux, *Onomasticon*, Bk. VII, § 87: τὰ δὲ κρουπέζια ξύλινον ὑπόδημα, πεποιημένον εἰς ἐνδοσιμον χορῶν. V. edit. Dindorf, Vol. V, Pars I, *Annotationes*, p. 348. The Greek word κρουπέζιον, diminutive of κρούεζα, from κρούω to strike and πέζα the foot, is more expressive than *scabellum*, the diminutive of *scamnum*, a bench or stool. Liddell and Scott, however, mention *scrupeda* and *sculponea*, rarely found in the authors, which may be connected

Plate IX, p. 19, Le Blant, *op. citat.*, where He stands on the mystic mount from which the four rivers of Paradise issue : while He is young and beardless in other representations, where the reference is specially to His human character and actions. His left hand holds an open book, on which the words DOMINVS LEGEM DAT are inscribed. Lower down Apostles and Evangelists are seated, holding rolls (*volumina*), Matthew and Mark on the right, Luke and John on the left ; instead of LVCA or LVCAS the form LVCANVS, as in the name of the Latin poet, is used.¹ The whole group supplies us with a striking, I had almost said a living, commentary on the words of the Gospel, “When the Son of man shall sit on the throne of His glory, ye also shall sit upon twelve thrones, judging the twelve tribes of Israel.” Behind this row ten heads fill up the background ; one of these persons makes a gesture of acclamation, raising his right hand.

A symmetrical arrangement may be observed, for at one end of the row a young man is bowing down, as if adoring, on whose shoulder a senior lays his hand ; at the other end two females appear, corresponding both in age and relative position. Probably they are parents presenting to Jesus Christ their children who have died young. Such an interpretation is supported by an Inscription, QVIS NON DOLEAT AVT QVIS NON LVGEAT SVPER NOS RERVIV HOC TANTVM SCELVS N LXVII DIEB. TRES DVLCEC NOS FILIOS OBTVLISSE DO (*i.e.* Deo). The man with hands veiled by his mantle deserves attention ; a similar attitude of supplication is mentioned by Plantus, *Amphitruo*, Act I, Scene. I, v. 102,

Postredie in castra ex urbe ad nos veniunt flentes principes,
Velatis manibus orant, ignoscamus peccatum suum.

with κροίπιζα and κρούπαλα. With the explanation of Pollux compare Cicero pro Caelio, Cap. XXVII, § 65. “Mimi ergo est jam exitus, non fabulae : in quo quum clausula non invenitur, fugit aliquis e manibus, deinde scabilla conerepant, auleum tollitur.”

This object appears in a terra-cotta of the British Museum, which represents the treading of grapes to the sound of music. See also the *Catalogue of the Roman Court at the Crystal Palace* by Sir G. Scharf, No. 300. The clapping

Faun (Satyr), *scabellum* under his foot ; and No. 303—with a reference to Clarac, Musée de Sculpture, Plate 715, No. 1709.

¹ Colossians iv, 14. ἀσπάζεται ὑμᾶς Λουκάς ὁ ἱατρός ὁ ἀγαπητός ; and 2 Timothy iv, 11. Λουκάς ἵστίον μόνος μετ' ἐμοῦ. V. Pape *Wörterbuch der Griechischen Eigennamen*, s.v. Λουκάς, ᾶ ; others of the same name occur in Inscriptions.

² Matthew xix, 28, with which compare *ibid.* xxv, 31.

But in this case *velatis* seems to mean holding the *velamenta*—olive-branches wreathed with woollen fillets. Livy XXIV, 30, Ramos oleae ac velamenta alia supplicum porrigentes. V. Conington's note on Virgil, *Aeneid* VII. 154: *cf. ibid.* VIII, 116, 128; and Sophocles, *Oedipus Tyrannus*, V. 3,

Ἰκτηρίοις κλάδοισιν ἐξεστεμμενοι.

Compare Le Blant, *op. citat.* p. 20, text and notes. Similarly, in a miniature of the Menologium of the Emperor Basil, a woman wearing a mural crown, and therefore representing a city, advances with respect towards the Holy Family on their arrival in Egypt: Le Blant, *op. citat.*, p. 8.¹

Plate V shows a sarcophagus where eight trees form with their branches seven arches, while seven doves are seen in the foliage. This mode of dividing subjects is well known from the Trajan Column and other monuments; but the latter numeral may be explained as being Jewish in origin, and subsequently adopted by Christians. So we have it in the days of the week, and in the branched candlestick among the spoils of the Temple at Jerusalem, sculptured on the Arch of Titus, and in the New Testament, especially the Apocalypse—besides other examples, the seven Churches, the book sealed with seven seals, and seven angels with a trumpet given to each of them. Coming down to a later age, we may compare, in the hymn “Veni, Creator Spiritus,” attributed to Charlemagne, the words

Tu septiformis munere

translated by Dryden,

Plenteous of grace, descend from high,
Rich in thy seven-fold energy.

See Trench, *Sacred Latin Poetry*, p. 167, v. 9, with notes;

¹ V. Ducange, *Glossarium ad Scriptores Media et Infima Græcitalis*, s.v. Μηολόγιον. “Menologium Basilio Porphyrogenito Bulgaroctono Imperante ejusque jussu exaratum.” Basil II and Constantine XI reigned 976–1025. Sabatier, *Monnaies Byzantines*, Vol. II, pp. 144–149. “Ce règne se passa presque tout entier en guerres dispendieuses

contre les Bulgares, les Sarrasins ou les empereurs d'Allemagne, et en révoltes armées de quelques généraux de l'empire se disputant entre eux le sceptre d'Orient.” For the coins of these two Emperors see Plate XLVIII. According to Gibbon, Chap. XLVIII, edit. Smith, Vol. VI, p. 107 *seq.*, this Constantine is the ninth of that name.

see also the hymn of Adam of St. Victor, p. 157, "Septiformis gratiâ."¹

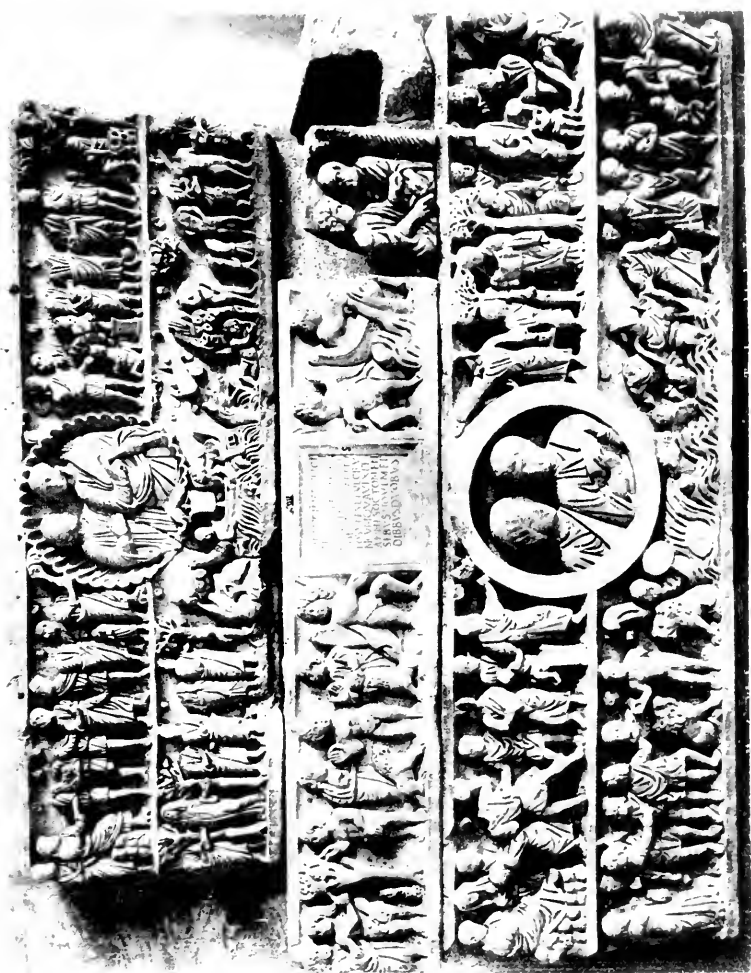
Plate VI is a sarcophagus with two rows of bas-reliefs, and in the centre a married pair, half-length figures, enclosed by a shell. The husband has a roll on which his titles may have been inscribed, but this is not certain. At the extreme right the sacrifice of Cain and Abel is represented: the latter holds a ram; the former is mutilated, and may have offered ears of corn, as in other sarcophagi. The Almighty is seated on a rock, His feet resting on the scabellum, which we have previously noticed. Christ stands behind holding a roll, perhaps with allusion to the appearances of our Lord upon earth before His incarnation, as in the burning bush, or in the fiery furnace of Nebuchadnezzar; or to a tradition that He re-arranged the text of the Scriptures that had been lost. Next follows a group consisting of a man arrested by Jews, wearing caps that resemble the modern fez. The last figure on this side of the shell is Moses receiving the Tables of the Law from a hand stretched out in the heavens, and therefore symbolizing the Deity. Such an emblem of divine interposition in human affairs occurs on coins frequently; *e.g.* in one found at Sutton near Woodbridge, Suffolk, Constantine the Great stands in a chariot, and extends his arm to grasp a celestial hand which is raising him to the skies: my Paper in the *Archæological Journal*, Vol. XXVIII, p. 37, 1871. Eckhel, *Doct. Num. Vet.*, Vol. VIII, p. 92 *sq.*, describes the device; he also quotes Eusebius, *Vita Constantini*, Lib. IV. c. 72; and the orator Eumenius, *Panegyricus Constantini*, Cap. 7 (speaking of Constantius, father of Constantine), "receptusque est consessu cœlitum Jove ipso dexteram porrigente." Compare *Traduction des Discours d'Eumène*, par M. L'Abbé Landriot et M. L'Abbé Rochet, Text p. 133, note p. 264; and Cohen, *Médailles Impériales*, Vol. VI,

¹ A better example is given by Trench, *ibid.* p. 155, XXX, De Spiritu Sancto.

Tu septiformis gratiæ
Dans septiforme donum,
Virtutis septifariæ,
Septem petitionum.

note on vv. 9-12. We find continually

in mediæval theology the sevenfold grace of the Holy Spirit (Isaiah xxx, 26, "The light of the sun shall be sevenfold") brought, as here, into connection with the seven beatitudes (the *virtus septifaria*), and with the seven petitions of the Lord's Prayer.



CHRISTIAN SARCOPHAGI AT ARLES.

p. 172, No. 568.¹ On the left of the central group we see Abraham sacrificing Isaac, who kneels before an altar; behind it on a rock the cloven hoofs of a ram substituted for him are visible. Two men accompany the patriarch; hence the artist has varied from the Scriptural narrative—“Abraham said unto his young men, Abide ye here with the ass; and I and the lad will go yonder and worship, and come again to you.”² The next subject is the miraculous multiplication of the loaves and fishes; the human figures want their heads, but the lower part of them as well as the baskets and a vase are well preserved. At the end, a person, Moses or perhaps Ezra (Esdras), seated between two Jews under a tree, is reading the law or Scriptures to the people. “And Ezra the priest brought the law before the congregation both of men and women. . . . And he read therein before the street that was before the water gate from the morning until mid-day.” Nehemiah, viii, 1–8.

Proceeding now to the lower row of reliefs, and beginning on the spectator's left, the first group that meets our eye is a woman praying, who extends her arms so as to form with her body a cross, between two trees, with a man outside each of them. Next follows the miracle of Cana, indicated by a vessel holding the water (ὕδρια) that was to be turned into wine.³ The third scene is the legendary tale

¹ Another instance has been discovered recently in our own country. V. *Numismatic Chronicle*, 1896, Third Series, No. 63, p. 235, Paper on a Hoard of Roman coins found at Bishop's Wood, Ross-on-Wye, by Mrs. Bagnall-Oakley; Christian Emblems—Consecration Coins.

Obv.—DIVVS or DIV· CONSTANTINUS PT. AVGG. Veiled head of Emperor.

Rev.—Quadriga, driven by the anima of Constantine, who holds out his hand to meet another large hand issuing from the clouds. Mint-marks—PLC, TRP, TRS.

² Genesis xxii, 5.

³ Hydria, a water-jar, as distinguished from the amphora and other vases, means one having three handles, a large one at the neck and two smaller ones at the body of the vessel. An example is given by Dr. Birch, *History of Ancient Pottery*, edit. 1858, Vol. II, p. 80, Fig. 142, with the word ΗΥΔΡΙΑ

inscribed upon it. Some writers say that the *calpis* is a later modification: V. *ibid.*, Fig. 143; others consider it identical.

For a frequent use of the Hydria, see Sir G. Scharf's "History of the Characteristics of Greek Art" prefixed to Wordsworth's *Greece*, p. 35 *seq.*, Fig. 75. Portion of Mr. Rogers's painted vase. "Women are seen passing to and fro with pitchers or hydrie on their heads and engaged in conversation, while the foremost woman is filling her pitcher." This vase painting represents the fountain of Callirrhoe, with the inscription ΚΑΛΙΡΡΗΕ (καλλιρρή κρήνη); V. *Catalogue of Vases in the British Museum*, Vol. I, Nos. 475–182 and 720, Hydrophoria, Water-carrying.

In the Gospel *hydria* must mean a vat, as the capacity is so much greater; John ii, 6, Ἦσαν δὲ ἐκεῖ λίθιναι ὑδρίαί τις κατὰ τὸν καθαρισμὸν τῶν Ἰουδαίων κείμεναι, χωρῶσαι ἀνὰ μετρητὰς δύο ἢ τρεῖς, translated *holding two or three*

of Daniel poisoning the Babylonian serpent coiled round a tree. Underneath the shell above-mentioned we see a boat with mast and sail, and three mariners in it; below on one side Jonah thrown overboard is swallowed by a monster, while in the background there appear to be some remains of an evil genius raising a tempest; on the other side Jonah, vomited by the monster, reposes under a gourd. This subject naturally found place in early-Christian Art, as the prophet, three days in the belly of the fish, was regarded as a type of our Lord's resurrection on the third day. St. Matthew xii, 39-41, "An evil and adulterous generation seeketh after a sign; and there shall no sign be given to it, but the sign of the prophet Jonas." But others suppose that these two scenes, taken in their connexion, are emblematical of the passage from the agony of martyrdom to the rest in Paradise. Next come our First Parents standing on either side of the tree of the knowledge of good and evil; a sheaf of corn is placed upright before Adam to denote the life of toil that awaits him. "In the sweat of thy face shalt thou eat bread, till thou return unto the ground"; Genesis iii, 19. Lastly, we observe Daniel erect between lions;¹ two men are bringing food—one a loaf inscribed with a cross, and the other a fish—probably symbolizing the Eucharist. So, in

pickins a-piece, both in the Authorised and in the Revised Versions; the Attic *μυτητής* being nine gallons approximately. Bloomfield, note *in loco*, says, water-vats for the various ablutions prescribed by the Jewish law, and refers to Luke xi, 39, *Νὺν ὑμῶς οἱ Φαρισαῖοι τὸ ἔξωθεν τοῦ ποτηρίου καὶ τοῦ πίνακος καθαρίζετε*

Compare Juvenal, *Satire* III, 246:

Hic tignum capiti incutit, ille metretam.
Sharp strokes from poles, tubs, rafters,
doom'd to feed.

Gifford's Translation.

Juvenal here seems to use *metreta* in a general sense for any kind of cask or barrel; and so Forcellini s.v. understood the passage, for he subjoins it to his explanation, *gens vasis olearii et vinarii, et catus, amphora*. In the following section he discusses this word as *mensuræ* *gens*. Heinrich, however, applies the latter meaning to this line of Juvenal, Ein Wein-oder Oelfass von bestimmten

Masse, auf der Schulter über die Strasse getragen.

¹ C. O. Müller, *Archæology of Art*, Sect. 213, Remark 2, English Translation, p. 206. Constantine caused the Good Shepherd, as well as many scenes from the Old and New Testament, to be sculptured (Eusebius, *Vita Constantini* IV., 49), among the former Daniel, who, together with Jonah, was a most favourite subject of typical representation. *Denkmäler der alten Kunst*. Part I, Plate LXXIV, No. 431. Ein Wandgemälde aus den Christlichen Catacomben . . . Jonas vom Wal-fisch verschlungen und ausgespieen, Daniel in der Löwengrube: from Aringhi, *Roma subterranea*, Tom. II, p. 101. Pératé, *op. citat.*, p. 296. It is supposed that Daniel, a sculptor of the fifth century mentioned by Cassiodorus, placed Daniel in the lions' den on sarcophagi, as a signature, of course with allusion to his own name.

the Apocryphal Book entitled *History of the Destruction of Bel and the Dragon*, Habakkuk is commanded by the angel of the Lord to carry to Daniel the dinner that had been provided for reapers.

We must not suppose that the subjects portrayed on the Arlesian Tombs are Christian exclusively; the following examples will prove the contrary: In Noble-Lalauzière, *Abrégé chronologique de l'histoire d'Arles*, we find two that represent the Calydonian boar-hunt. Plate XXIV, No. III, and Plate XXX, No. I, where Atalanta, like an Amazon, is conspicuous, easily distinguished as the only female among the hunters, carrying a bow and quiver full of arrows; but the latter sarcophagus, now in the Musée Lapidaire d'Autun, seems to be more accurately reproduced in a heliogravure published by the Congrès Archéologique, Tome XLIII^e, *Notes et Mémoires*, p. 793 *sq.* This design appears on the front; and it has been conjectured that the return of Meleager from the chase was the scene figured on one of the ends, which is certainly the case in the cenotaph of Euripides at Constantinople, where we see a man seated holding a spear, another carrying a boar on his shoulders, and a horse drinking to slake his thirst after the fatigue of the hunt.¹ Seroux d'Agincourt, *History of Art by its Monuments*, Vol. II, Sculpture, Plate I, No. 7, has an engraving of Meleager standing between a hound and a boar's head.

Another sarcophagus, discovered at Arles and now in the Louvre, is more important, and presents far greater variety. (Lalauzière, Plate XIX, "Tombeau dans l'Eglise des Minimes d'Arles.") The reliefs upon it comprehend the creation of man, his life and death. On the spectator's left we see Prometheus seated before a *cippus*, occupied in modelling a human figure that stands upon it, while another is near it, already finished. In both cases the arms are close to the body, and the legs in contact with each other, according to the archaic style of Greek sculpture.² At the feet of the Titan is placed a basket

¹ My Paper on the "Antiquities of Constantinople" in the *Archæological Journal*, 1882, Vol. XXXIX, pp. 147-149, text, and notes containing many references.

² Scharf's Introduction to Wordsworth's *Greece*, *op. citat.*, p. 12. At this period figures were generally represented with the limbs close together—compare Fig. 71 on p. 33.

containing clods of earth—the material with which he works. Compare Horace, *Carm.* I, xvi, 13 :

Fertur Prometheus addere principi
Limo coactus particulam undique
Desectam.

If the reader desires an illustration in connection with this passage, he will find it in Pine's edition, every page of which is engraved, "Prometheus humani corporis sceleton fingens," from Montfaucon's *Antiquité Expliquée*.

Minerva, standing behind the artist, puts her hand on his shoulder, and, as the Goddess of Wisdom, appears to be guiding him by her counsels. In the background two busts are visible—the Sun with a radiated crown, and a youth, perhaps Hesperus, wearing the *exomis*, which leaves one shoulder bare. Mercury (*ψυχιομομπός*), known by his usual attributes—the *caduceus* and *petasus*—is conducting to the lower world a soul represented as a young female, with the spotted wings of a butterfly, and flying drapery that forms an arch over her head.¹ Between the legs of the deity Cupid and Psyche embrace each other; but as one of them is bearded, the sculptor, like a barbarian imitating a Greek *stater*, seems to have copied some earlier work without understanding it.

Next come the three Fates: Lachesis calculates the horoscope, holding in her left hand a ball on which bands are crossed, and in her right a wand pointing to the natal star; Clotho stretches out the thread that symbolizes the course of human life; Atropos seated bears in her lap a roll on which destiny is inscribed, and her right hand may have grasped the scissors to cut short a mortal career.² Near her an urn (*sitella*) stands on a low column, probably containing the lots used to decide the doom of the departed; and behind her stands a woman draped in long garments, conjectured to be Death. There are also two other females in the background, wearing plumes on their heads. Before Atropos Neptune stands

¹ Milman's edition of *Horace*, *Carm.* I, x, fin.

Tu pijs letis animas reponis
Sedibus; virgaque levem coerces
Aurea turbam, superis Deorum

Gratus et imis.

Engraving on p. 22. Mercury pre-

senting a soul to Pluto from *Picturæ Antiquæ Sepulchri Nasonum*, Plate 8.

² Milton, in *Lycidas*, has transferred this action to another divinity,
Comes the blind Fury with the abhorred shears,
And slits the thin-spun life.

out prominently, holding his trident and planting one foot firmly on a rock, and behind him we see the busts of Castor and Pollux, who have pointed caps surmounted by stars. A semi-recumbent female at the right-hand corner of the sarcophagus is supposed to be the Earth, but there are no distinctive attributes so as to identify her.

Of the sculptures at Arles that have survived the wreck of antiquity a Venus, of Hymettian marble, is unquestionably the most valuable. It now adorns the Galleries of the Louvre, but it was discovered, A.D. 1651, among the ruins of the theatre in this city, between the two columns which alone still remain upright. The upper part of the body is nude, the lower covered by a mantle, hanging down from the left arm in graceful folds. As the right arm and the fore-part of the left arm are wanting, we are unable to state with certainty what the motive of the figure was. Girardon (1628–1715) restored it by placing a mirror in her left hand which Venus looks at, and an apple in her right; but these additions are doubtful. More recent *connoisseurs* think that the goddess is here represented as Victorious (*Victrix*), resting on a spear, and holding in her left hand a helmet, of Mars or perhaps Æneas: Clarac, *Musée de Sculpture antique et moderne*, Tome IV, p. 79 text, No. *1307, Plate 342. Visconti expressed the same opinion, and he is followed by Müller-Wieseler, Part II, No. 271, Plate XXV, Aphrodite-Siegerin. A good illustration is supplied by Mr. C. W. King's *Antique Gems and Rings*, Vol. II, XXIII B, No. 8: Venus *Victrix*, known as such by the helmet and palm branch in her hands, and the armour lying at her feet. On the other hand, M. Froehner, *Notice de la Sculpture antique du Musée du Louvre*, thinks that the right hand was employed in arranging the hair—a motive which frequently recurs, and is in the present case quite suitable.¹ The head, remarkable for its grace and beauty,

¹ Venus d'Arles, No. 137, pp. 179–183. This author remarks that we might expect to find that Venus was specially worshipped at Arles, since the place was called *Colonia Julia Arelatensis*, and the Julian family traced their descent from Venus and Anchises, as legendary ancestors. A bust of the goddess, executed in a fine

style, was also found in the ruins of the theatre. In a note Fröhner mentions the price paid for this statue. “On vient de retrouver, à Arles, l'acte de vente de la célèbre Venus. Ce chef-d'œuvre fut payé 61 livres seulement. *Figaro* du 31 Mai, 1867.” He considers the Townley Venus and the one at Arles to be copied from the same original, which belonged

is encircled by a fillet with its ends falling on the shoulders. We should also observe a bracelet (*spinther*) that holds its place on the left arm by the natural elasticity of its own pressure. This word appears four times in a passage of Plautus, *Menæchmi*, Act III, Scene 3, and together with *armillæ*, which serve to explain it.¹

The semi-nude Venus of Arles reminds us of another statue in the same Museum still more famous—the Venus of Melos. Such a treatment of drapery seems intended to reconcile with the rules of decorum a mode of representation favourable to the purposes of art.² If the traveller, on his return from Arles, visits the Louvre, this charming specimen of Greek loveliness will bring back to his recollection the same type which he has seen among the *Arlésiennes* as he perambulated the narrow and irregular streets of their city.

It may seem very strange, but it is the fact, that for many years a controversy raged concerning this statue, some maintaining that it was Diana, others that it was

to the school of Praxiteles. The article which I have quoted ends with a copious biographical notice, occupying nearly two closely printed pages, and including publications which appeared 1656–1863.

¹ Plautus, *loc. citat.*

Ancilla

Menæchme, amare ait te multum
Erotium,

Ut hoc nunc una opera ad aurificem
feras,

Atque huc ut addas auri pondo unciam,
Jubeasque spinther novum reconcin-
nari.

Menæchmus Sosicles

Ubi illæ armillæ [sunt] quas
una decit?

Armillæ usually mean a kind of female ornaments, so Suetonius, *Vita Caligula*, Cap. 52, mentions them as proofs of effeminacy when they were worn by that Emperor, “ne virili quidem (habitu) manuleatus et armillatus in publicum processit. Cf. id Nero, Cap. 31. They have been frequently brought to light in England. See *Roman Cheshire* by Mr. Thompson Watkin, p. 313. Two very beautiful armillæ of gold found in 1829 or 1831, one of which is engraved.

The word *spinther* seems to be the

same as the Greek *σφιγκτήρ*—the peculiarity above-mentioned of this bracelet, which requires no clasp, resembling the contractile muscle of the anus. F(φ) is interchangeable with P, e.g. *πορφύρα*, *φαινόλη*, *Φοίνιξ* re-appear with a slight alteration—*purpura*, *panula*, *Pænus*. F in English and German corresponds to P in Latin, e.g. *pes*, *fuss*, *foot*—*pugnare*, *fechten*, *fight*. Key on the *Alphabet*, pp. 60, 87.

It is stated that originally there was a precious stone in the bezil (*chalon*) of the bracelet of the Venus d'Arles, which on account of its position on the upper arm would be classed with the *περικάρπια*, those on the wrist being called *περικάρπια*.

The armillæ given as military decorations must have been more massive than those used by ladies.

As far as I have observed, Smith's *Dictionary of Antiquities* omits the *spinther*, but Rich has a good article, of which I have made use.

² Millingen, *Ancient Unedited Monuments*, Series II, Plate IV, Venus of Capua, semi-nude; Plate V, probable restoration. Plate VI, Venus of Melos, semi-nude. See also p. 6, note.

Venus. In 1684 M. de Vertron composed the following stanza :

Silence, Callisthène, et ne dispute plus !
 Tes sentiments sont trop profanes ;
 Dans Arles c'est à tort que tu cherches Vénus ;
 L'on n'y trouve que des Dianas.

However, common sense prevailed, and was supported by the authority of Louis XIV, who, on receiving a small model of the figure in wax, remarked, "Que la statue lui paraissait bien restaurée, et qu'il croyait que c'était une Vénus."¹

Lastly, this part of our subject has a special interest for us English antiquaries, because one of the finest works of Greek art in the National Collection bears a striking resemblance to the Venus of Arles, with the exception that the position of the drapery is reversed, for it hangs on the right arm, while the left arm is upraised. The execution of the figure is admirable, and the marble retains its original polish, which is the case with some sculptures in the pediments of the Parthenon that even now present a smooth surface, and may have received the finishing touches from the hand of Phidias himself. This statue, usually called the Towneley Venus, was discovered among the ruins of the baths of Claudius at Ostia, and we may notice as a curious coincidence that a bronze medallion of Lucilla, daughter of Marcus Aurelius and Faustina Junior, wife of the Emperor Lucius Verus, exhibits a figure similarly draped, which Cavedoni explains thus: "Lucille sous l'image de Vénus Génératrice jouant avec ses enfants."²

¹ Lalauzière's work adheres strictly to chronological order, and narrates events as they occurred under their respective years. Accordingly under the heading 1651, p. 472, he mentions the discovery of the statue, and describes it: "Le 6 juin, on trouva la statue de Vénus, en creusant une citerne dans la maison de l'Abbé Brun, etc." 1684, p. 495, "Sa Majesté (Louis XIV) chargea François Girardon, son premier sculpteur, de la restaurer. Ce fameux artiste s'en acquitta avec son talent ordinaire. Il lui mit une pomme d'or à la main droite et un miroir à la gauche où elle semble se regarder. Le Roi la fit placer dans la galerie de Versailles au premier rang sur un beau piédestal,

où on grava ces deux mots: Vénus d'Arles." The book ends with the death of this monarch. 1715, p. 515, "Le 1^{er} septembre, Louis XIV, dit le Grand, mourut à Versailles, âgé de soixante-dix-sept ans, comme un héros véritablement chrétien et digne du nom de Grand que toutes les nations lui ont si justement donné." Lalauzière is a useful annalist, but he cannot be commended as an impartial historian.

² Taylor Combe, *Description of Ancient Marbles in the British Museum*, 4to, Part I, No. 8, with a full-page engraving. The medallion referred to is copied in C. O. Müller's *Denkmäler*, Taf. LXXIV, No. 427b. Compare wall-paintings with similar subject, *ibid.* No. 427a.

I have already said that there are some striking points of difference between the Antiquities of Nîmes and those of Arles; this remark applies with great force to their coinage. The former struck money in Celtic times, anterior to the Roman occupation, of which I exhibit a specimen. The device on the *obverse* is a young man's head, sometimes laureated; on the *reverse* a wild boar (*sanglier*) running to left—an emblem not as frequent as the horse, but still so common that every student of Gaulish Numismatics soon becomes familiar with it.¹ Nor will the traveller in France be surprised at its recurrence, for the animal, though unknown in England, still haunts the extensive forests of our neighbours, and his stuffed carcase, or at least a part of it, may be seen in the shop windows of their provincial cities. Nemausus was a Roman colony belonging to the class called by Pliny *oppida Latina*; hence its inhabitants had not the full rights of Roman citizens, but only the *jus Latii*.² Their bronze money presents a singular type—which since the reign of Francis the First has been adopted in the armorial bearings of the city—on the *obverse* the heads of Augustus and Agrippa back to back (*adossés*) with the letters IMP above and DIVI F below; on the *reverse* a crocodile looking to right, chained to a palm-tree, with the legend COL NEM. But we should further observe that these coins may be divided into three classes: in the first Augustus is bare-headed; in the second he wears an oaken wreath (*corona civica*); in the third he is called Father of his country—P.P., *pater patriæ*. These varieties correspond with the gradual development of the powers conferred upon him. Agrippa commanded the fleet at Actium, and also gained a naval

¹ See *Catalogue des Monnaies Gauloises*, by Muret and Chabouillet. The Celtic coins are under the heading Nemausus, Nos. 2684–2716; the Roman, under Nemausus Colonia, Nos. 2717–2877: Nos. 2684–2700 have on the *reverse* NAMAΣAT, NAMA, &c., and for the device, *Sanglier en course à gauche*.

² Pliny, *Nat. Hist.*, Lib. III, Cap. IV, Sect. 5, § 37, edit. Sillig, Nemausum Arecomiorum . . . oppida vero ignobilia XIX, sicut XXIV Nemausiensibus attributa. Ptolemy, *Geo-*

graphia, II, x, 6, p. 241, edit. Car. Müller, Gallia Narbonensis, Μετὰ δὲ τούτους μέχρι τῶν Ῥοδαίου ποταμοῦ Ὀυόλκαι οἱ Ἀρηκόριοι, ὧν πόλις μεσόγειοι Ὀνιγδόμαχος, Νέμανσον κολῶνία. The Volcæ Arecomiei had territory near Nîmes and Avignon—east of the Volcæ Tectosages between Toulouse and the Pyrenees.

In the towns which received the *Jus Latii* or *Latinitas* those who held a civil office obtained the privilege of Roman citizenship.

victory at Mylæ on the coast of Sicily; his head is therefore always adorned by the rostral crown.¹

The crocodile chained to a palm-tree evidently refers to the conquest of Egypt, and therefore proves the date of the *as* struck at Nîmes approximately; the crown which appears in the upper part of the field may indicate the defeat of Cleopatra. We know that Augustus formed five great legionary colonies in the South of Gaul—at Arelate, Narbo Martius, Arausio, Bæterris, and Forum Julii (Arles, Narbonne, Orange, Béziers, and Fréjus). Taking this fact in connection with the device above-mentioned, we can hardly doubt that the soldiers employed in the subjugation of Egypt were sent to Nîmes, and as many of them were only auxiliaries, and natives of that country, their settlement in the territory of the Volcæ Arecomici would naturally have an inferior rank assigned to it. A French antiquary remarks that the Sun of Provence often blazing with the torrid heat of Eastern climes, and the rapid rise of the Rhône at some seasons, like the inundating Nile, would make the new-comers feel that they had scarcely been expatriated.

The coin I have described is sometimes, but rarely, found with a projection resembling the foot of an antelope, or of a boar according to others. From its inconvenience it cannot have been in circulation as current money. Caylus supposed, and I have seen no better explanation, that, as many of these pieces were found in the Fountain at Nîmes, they were *ex voto* offerings to the Deity who presided over the spring. It is said that objects of similar form and containing perfumes were placed in Egyptian tombs; if this is the case, we should find here an illustration that would corroborate the account of the colonization given above.²

On the other hand, though Arles has a Celtic name (*Arelath*), it presents no coins of the præ-Roman period,

¹ Horace, *Odes* I, vi, 3,
Quam rem cunque ferox navibus, aut
equis

Miles, te duce, gesserit.

Orelli *in loco*, Mari ad Liparas devicit
Sex. Pompeium Cn. F. pro victoria ab
Augusto corona rostrata donatus.

² Professor Flinders Petrie lent me
for exhibition the leg, apparently of
some animal, one inch and a quarter

long, found in an Egyptian tomb, of
porcelain, blue and glazed, like the leg
projecting from medals found at Nîmes.
It was used as a charm or amulet, being
a symbol of power. So we read in the
Old Testament, Psalm cxlvii, 10, "He
delighteth not in the strength of the
horse: He taketh not pleasure in the
legs of a man."

nor do any indicate its existence even under Julius Cæsar and the earlier Emperors. To find them we must descend to the fourth century; from that time till the fall of the Western Empire they are numerous enough. Constantine the Great fixed his residence at Arles in the year 308, and established a mint there.¹ It issued money bearing the likeness of himself, his mother Helena, his wife Fausta, and his sons Crispus, Constantine II, Constans I, and Constantius II. In the exergue the abbreviation ARL is preceded or followed by P. S. T. or Q, signifying (*Officina*) Prima, Secunda, Tertia, Quarta—i.e. branches of the *atelier monétaire*. The letters OF. II, OF. III, etc., on the medals of Valentinian, Valens, and Gratian seem to prove that this interpretation is correct. A. B. F. Δ., which sometimes occur, would of course have the same meaning.²

In the *Congrès Archéologique*, Vol. XLIII, pp. 570–603, Plates I–VI, facing p. 592, Licinius père—Jules Nepos, we have a full account of the money struck at Arles under the Lower Empire. The types are for the most part monotonous and barbarous; they are executed in low relief, and contrast very unfavourably with the fine series of Roman medals that belong to the reigns of Trajan, Hadrian and the Antonines. It will be sufficient here to mention the following devices which frequently recur:—Mars, helmeted, walking to right, carrying a spear and trophy, at his feet two captives seated in a sorrowful attitude; Sun radiated, semi-nude, holding a globe in his left hand; two winged Victories placing upon an altar a shield inscribed VOT. P. R. (*vota populi Romani*); Gate of a camp, surmounted by two or four towers—star above; Victory or Emperor trampling on captive kneeling or prostrate.³

¹ *The Numismatic Chronicle*, 1896, Part III: Paper by Mrs. Bagnall-Oakeley on "Roman Coins found at Bishop's Wood," cited above, supplies proof of the great circulation of money issued by the mint at Arles (Constantina). Pp. 215–217. Constantinus I, the Great. Number of coins found 2,455; 465 from Arles, next in amount to those struck at Trèves. *Ibid.* p. 210. The total number of pieces in this hoard that have been examined is 17,550, and as they are all from foreign mints, it has

been conjectured that they formed part of a military chest, brought from the Continent to pay the soldiers.

² *Congrès Archéologique*, Séances Générales tenues à Arles, *op. citat.* Plate I, Licinius père PARL, TARL, SARL: Constantin le Grand QARL.

³ Cohen, *Médailles Impériales*, Vol. VI, pp. 47–532, A.D. 307–480, Plates II–XIX. *Catalogue de la Collection Ponton d'Amécourt*, text pp. 100–132; Plates XXV–XXXII, Nos. 653–828, *photogravures* from plaster casts.

Constantine III served as a soldier in Britain. When the barbarians were ravaging Gaul, in the time of Honorius, the legions proclaimed him Augustus in the year 407. He resided at Arles, was besieged there, took refuge in a church, and to save his life was ordained a priest. But this measure proved unavailing, for Honorius beheaded him together with his son Julian, A.D. 411. I exhibit one of his gold *solidi*—*obv.*, D. N. CONSTANTINVS P. F. AVG. (*Dominus noster Constantinus pius felix Augustus*), bust, diademed, with *paludamentum* and cuirass. *Rev.*, VICTORIA AAVGGG (*Victoria Augustorum*).¹ Constantine standing to right, holding standard and globe surmounted by Victory, who is crowning the Emperor. The letter G thrice repeated indicates, I presume, Constantine III and his two sons, Constans and Julius. A and R in the field, separate—the former behind, and the latter before the Emperor—stand for Arelate. This is an unusual place for the name of the city where the coin was minted; we should expect to find it in the exergue, but examples of the variation may be quoted from the *Congrès Archéol.*, *loc. citat.* Plate VI, No. 77 Avitus, 78 Majorian, 79 Severus III, 80 Julius Nepos. In the *solidus* from Arles the exergue is occupied by the letters CON OB, which have exercised the ingenuity of many numismatists. CON or COM is evidently Constantinople; but OB was formerly supposed to mean 72—the numerical value of these letters in Greek—with reference to the law of Valentinian, enacting that there should be 72 gold solidi in the pound weight; but the opinion now prevails that they should be interpreted as an abbreviation of *obryzum*, *i.e.*, pure gold according to the standard of Constantinople.

Obryzum seems to signify gold refined by fire, but the etymology is doubtful; we cannot accept the derivation of Isodorus “quod obradiet splendore,” for it savours of “antiquated imbecility.”²

¹ The legend on this *reverse* has been fully discussed in my Paper on the “Antiquities of Carinthia,” *Archæological Journal*, 1896, Vol. LIII, p. 69 *seq.*, note. For the coins of Constantine III compare Cohen *op. citat.* text VI, 492; Plate XVII, Nos. 3, 5—*Reverses*,

VICTORIA AVGGG, AAVGGG, AAVGGGG.

² *ὀβρυζον is akin to *obrussa*, the testing of gold by fire. Du Cange, *Glossarium mediæ et infimæ Latinitatis*, edit. Henschel, revised by Léopold Favre (Niort, 1886), Tom. VI, p. 18, s.v.

Some information concerning *assaria* of this period, and the legends upon them, is given in my paper on coins found at Sutton, near Woodbridge: *Archæological Journal*, Vol. XXVIII, pp. 34-40.

If a personal reference may be pardoned, I would say that this Paper has cost me some labour, aggravated during my stay at Arles by declining strength in a malarious climate; but that labour has been beguiled by the hope that I might induce some of our compatriots to descend from the express train that hurries on to Marseilles; and then to admire the lineaments of Hellenic beauty in the humbler Arlésiennes,¹ and contemplate ruins still dignifying a city which, in the days of her glory, deservedly received the proud title of the Gallic Rome.²

obryzum. τὸ πολλάκις ἐψηθὲν, τὸ καθαρώτατον. "Vita S. Hilarii Arelatensis. Corpus suum diversis mancipavit ægritudinibus, ut supernæ monetæ verum obryzum ægritudinum caleulo exortum thesaurus reconderet æternus." Comp. the First Epistle of St. Peter i, 7: *ἴσα τὸ δοκιμὸν ἑμῶν τῆς πίστεως πολυτιμώτερον χρυσοῦ τοῦ ἀπολλυμένου διὰ πρὸς δὲ δοκιμαζομένου ἐνριθῆ εἰς ἔπαινον καὶ δόξαν καὶ τιμὴν ἐν ἀποκαλύψει Ἰησοῦ Χριστοῦ.* Thucydides, Bk. II, Chap. 13, ἀπίφαινε δ' ἔχον τὸ ἄγαλμα (ἀντὶς τῆς θῆου) τεσσαράκοντα τάλαντα σταθμὸν χρυσοῦ ἀπέφθον, καὶ περιαιρετὸν εἶναι ἄπαν. Pericles endeavours to animate the Athenians by a consideration of their great resources. Thirlwall, *History of Greece*, 8vo edition, Vol. III, p. 84. The statue of Athene in the Parthenon alone contained forty talents' weight of pure gold, in the ægis, shield and other appendages.

A notice of the gold bars inscribed OBR, found in Hungary, is given in a recent number of the *Classical Review* published by Nutt; but I am unable to cite the reference exactly.

¹ *Congrès Archéologique de France*, XLIII^e Session à Arles—Séance d'ouverture du 25 Septembre 1876. "On remarquait surtout dans l'assistance un grand nombre de dames, venues pour témoigner une fois de plus que la beauté et l'élégance traditionnelles de la population féminine dans la ville d'Arles, s'allient toujours à un esprit éclairé." The type of beauty which we observe at Arles, inherited from Greek and Saracen ancestors, appears more conspicuous in

the lower orders; and it has been suggested that it is so, because they have been less intermingled with extraneous races than those in a higher social position.

² The phrase *Gallic Rome* is derived from a poem by Ausonius, and the passage in which it occurs seems to make an appropriate conclusion to the foregoing remarks. *Ordo Nobilium Urbium* (XVIII), edit. Schenkl.

Pande, duplex Arelate, tuos blanda
hospita portus,
Gallula Roma Arelas, quam Narbo
Marius et quam
accolit Alpinis opulenta Vienna
colonis,
præcipitis Rhodani sic intereisa
fluentis
ut mediam facias navali ponte plateam,
per quem Romani commercia suscipis
orbis
nec cohibes populosque alios et mœnia
ditas,
Gallia quis fruitur gremioque Aquitana
lato.

Arelate occupies a place among the famous cities between Aquileia, which has retained its ancient name unaltered, and Hispalis, modern Seville. Cf. Ausonius, *Mosella* XVIII, 2, s.f. v. 480 sq., p. 97, edit. Schenkl.

duplicemque per urbem
Qui meat et Dextræ Rhodanus dat
mœnia ripæ.

II. Index nominum et rerum. Dextra ripa (Arelatis pars). Inscriptio apud Gruter 426, 4, ad dextram Rhodani ripam pertinere videtur. The traveller who has not only visited Arles, but

APPENDIX.

Nemausus also occurs in the *Itinerarium a Burdigala (Bordeaux), Hierusalem usque*, &c., appended to the *Antonine Itinerary*, p. 552, edit. Wesseling (p. 262, edit. Parthey and Pinder).

mutatio Ambrosio (Pont. Embrieu ?) .. mil XV.

civitas Nemauso mil XV.

mutatio Ponte Aerarium (perhaps Bellegarde) mil XII.

Mutatio must be carefully distinguished from *Mansio*; at the former (*una posta*) horses were changed, at the latter accommodation was provided for travellers to pass the night, *manere* being equivalent to *pernoctare*. De Vit's edition of *Forcellini's Lexicon*, s.v. *Mutatio* and *Mansio* in *Nota*.

Pons Aerarium is said by Danville to be Bellegarde, and so called from toll paid at the bridge. *Corpus Juris Civilis*, Vol. I, p. 271, edit. Beck, Digest XIX, Tit. 2, S. 60, § 8. Smith's *Dictionary of Greek and Roman Geography* [G. L.]. Danville's supposition seems probable, as Bellegarde-station is about half-way between Nîmes and Tarascon (*V. Indicateur des Chemins de Fer*), situated on a hill that overlooks the Canal d'Aigues-mortes, and remains of a Roman aqueduct are still to be seen there, as we might expect, the Department of Gard possessing more monuments of that people than any other in France: *Vide* the excellent Map of Gard in *Joanne's Guide for Provence, Corse and Alpes Maritimes*. There is another Bellegarde in Drôme, a village in the mountains on the east side of the Department towards Gap.

Instead of Nemausus we find Nemuso in the Table of Peutinger—*vide Corp. Inscr. Lat.*, Vol. XII. Hirschfeld says, “sic videtur esse in tabula a me recognita,” p. 346, Sect. XLIV, *Volcarum Arecomicorum ager ad Rhodani ripam situs*; but Mannert's edition of the Table, Segmentum I. f., gives Nemeto. Dr. Conrad Miller also has Nemuso in his edition, which bears the title of *Die Weltkarte des Castorius*. This publication differs widely from its predecessors, being cheaper, smaller and more convenient, as it presents the whole of the ancient map in one piece, which can be folded so as to show separately any portion which the reader wishes to study. But its most striking peculiarity is the reproduction of the colours of the original, now preserved in the Imperial Library (Hofbibliothek) at Vienna as one of its most valuable treasures. Rivers are red; buildings have red roofs and yellow gables; water is green; mountains have various colours, perhaps with reference to different kinds of stones. The Vosges and Schwarzwald, as wooded, are illustrated by trees. The fac-simile of the Map, on a reduced scale, is accompanied by an Introduction, pp. 126, including the Literature of the subject, and an Index to the Text, pp. I. II. An Index of places, with references to the Segments and their subdivisions, such as Mannert gives, would be

crossed the bridge and taken a walk on the opposite bank of the Rhône, in the faubourg de Trinquetaille, will enjoy a distant view of the amphitheatre and be able to understand the phrases “duplex

Arclas,” and “Dextra ripa.” *Guides-Joanne*; Provence-Corse, Alpes Maritimes. Plan of Arles, p. 42; Excursions, p. 52.

a useful addition. This map of the Roman Empire derives the name by which it is usually called from Konrad Peutinger, a citizen of Augsburg and distinguished antiquary, who formerly possessed it.

For the money of Nemausus see the following authors:—

Eckhel, *Doct. Num. Vet.*, Vol. I. p. 69 *sq.*, cited in the Appendix to my Paper on the “Antiquities of Vienne.” *Archæol. Journ.*, Vol. LII., p. 152.

Duchalais, *Description des Médailles Gauloises de la Bibliothèque Royale*, 1846, pp. 72–83, §§ 253–292; Autonomes, 253–258; Auguste et Agrippa, 259–291; Incertaine, 292.

Hucher, *L'Art Gaulois, ou les Gaulois d'après leurs Médailles*, Part I, p. 32 *sq.* ΝΑΜΑΣΑΤ. Part II. Figs. No. 202 in p. 126, and No. 208 in p. 129.

Catalogue des Monnaies Gauloises de la Bibliothèque Nationale rédigé par Ernest Muret, et publié par les soins de M. A. Chabouillet, 4to, 1889.

Atlas des Monnaies Gauloises . . . publié sous les Auspices du Ministère de l'Instruction Publique, par Henri De la Tour, fol., 1892.

Nîmes Gallo-Romain, Guide du Touriste-Archéologue, par Hippolyte Bazin, in the Series of Villes Antiques; Chapitre Septième, pp. 275–283, Monnaies et objets divers, Médailles des Volques, &c.; especially I. § 4, p. 277 *sq.*, Médailles dites Pieds de sanglier.

Eckhel, *op. citat.* Vol. I, p. LIV, Prolegomena Generalia, deservedly praises Caylus as eruditissimus in mechanica Veterum, and Vol. I, p. 70, refers to his explanation of the singular medals of Nîmes, which have the foot of some animal projecting from them: *Recueil d'antiquités Égyptiennes, Étrusques, Grecques, Romaines et Gauloises*, 1752–67, Tome III, pp. 341–343, especially the last page “elles (ces pièces) se vendaient dans la seule ville de Nîmes, pour servir d' Ex-Voto, pour être portées par superstition, ou jetées dans la Fontaine qui lui était consacrée.” Plate XCVIII, No. II; p. 342, un pied de Biche très-distinctement figuré. This fountain, which is in a public garden close to the Temple of Diana, also called a Nymphæum, has been celebrated by Ausonius in juxtaposition with one at Divona (Cahors). *Ordo Urbium nobilium* XVIII, p. 103, edit. Schenkl, 1883 (*Clare Urbes*, XIV, p. 225, edit. Delphin):
V. 159, *seqq.*

Salve, urbis genius, medico potabilis haustu,
Divona Celtarum lingua, fons addite divis;
Non Aponus potu, vitrea non luce Nemausus
Purior, aequoreo non plenior amne Timavus.

Divona must not be confounded with Divio or Dibio (Dijon). It was afterwards called *Cadurci* from the people whose capital it was, according to a common custom in Gaul, and the modern name is only a corruption of this word. Zeuss, *Grammatica Celtica*, editio altera, 1868, fasc. I, p. 13, and especially p. 20, cui (Divona) conferenda videtur Divodurum, Divitiacus, Divio . . . Διούβωρα. Die bei Caius Julius Cæsar vorkommenden Keltischen Namen in ihrer Echtheit festgestellt und erläutert von Christian Wilhelm Glück, 1857, cf. omn., p. 4 *sq.* note*) on Divitiâcus, with many references and comparison of similar words, “altkymr. *diu* aus *divo*, ir. *dia* = dê aus dêvo (deus, vgl. skr. *dêva*, gr. *ἔϊος* für *ἔϊφος*, lat. *dīvus*)” &c. Ausonius means to

say that in the Celtic language *Di* or *Div* is God, and *Von* or *on* is water or fountain: *Dictionary of Greek and Roman Geography*, Article *Divona* by Mr. George Long.

With the legend *NAMASAT* we may compare Zeuss *op. citat.* p. 10. *nemed* gl. sacellum, Vernemetum, Britanniae oppidum (*Antonine Itinerary*), Tasinemetum, *loc. Noric*, &c. *Vide* the additional Article in the English edition of *Forcellini's Lexicon*, s.v. Vernemetes . . .
 . . . hujusmodi nomen habuit Ecclesia S. Vincentii in urbe Bardigalensi. Venantius Fortunatus (Bishop of Poitiers) l. 1, carm. 9, v. 5 *seqq.* . . .

Nomine Vernemetis voluit vocitare vetustas,
 Quod quasi fanum ingens Gallicæ lingua refert.

This passage is parallel to that in Ausonius quoted above.

Zeuss, p. 85, Nemetes *Ἀργουστονέμετον* apud Ptolemæum; p. 161, silva quæ vocatur *Nemet*; p. 40, *Nemetes*, a German tribe inhabiting the left bank of the Rhine, between the Vangiones (Worms) on the North and the Tribocci (Spires) on the South: Cæsar mentions them in his account of the war with Ariovistus, *De Bello Gallico*, I, 51: *cf.* Tacitus, *Annals* XII, 27 Vangionas ac Nemetas; "duo hi populi inter se vicini fere semper junguntur," Orelli *in loco*; *id.* *Histories* IV, 70; Germany, 28.

The *Congrès Archéologique de France*, XLIII^e Session. Séances générales tenues à Arles, 1877, pp. 267-297, contains an elaborate memoir by M. Auguste Veran, entitled "Arles antique," sub-divided as follows:—I. La ville Celtique. II. La colonie Romaine. III. Arles sous Auguste et ses Successeurs. IV. Arles sous Constantin. V. Arles sous les Successeurs de Constantin et les Wisigoths. VI. Les Sarassins. This paper is illustrated by, Plate I, p. 272, Arelate sub Constantino, with modern names in red letters (folding Plate). Plate II, p. 288, Arles sous Constantin. Élévation, État actuel. Plan, Porte de Rome sur la voie Aurélienne élevée par l'Empereur Auguste: *ibid.* Plate III, Étude de Restauration. Échelle de 0^m·0035 pour mètre.

Städteleben, Kunst und Alterthum in Frankreich. Nebst einem Anhang über Antwerpen, von K. Bernhard Stark. Mit sieben lithographirten Grundrissen. Jena, 1855, pp. 619. I beg leave to call attention to this book, which is not likely to be generally known to English antiquaries, partly on account of its intrinsic merit, also because it was specially recommended to me by Professor Adolf Michaelis. The fourth chapter is devoted to Arles and Nîmes, pp. 67-106. A summary, which follows the Preface, at p. x, gives a good idea of its contents.

Vergleich beider Städte, S. 67-70. Monumente und geschichtliche Stellung von Arles, S. 70-82. Jetzige provençalische Literatur, S. 82-86. Nach Nîmes, S. 86-87. Erste Wanderung in Nîmes, S. 87-89. Die antike Welt in Nîmes, S. 89-105. Modernes, S. 105-106. Stark traces the progress of Arles from early times, when it was an emporium in connection with Marseilles, down to the fall of the Western Empire. We have in Cæsar, *De Bello Civili*, Lib. I, Cap. 36, a proof of its commercial activity: "Naves longas Arelate, numero duodecim, facere instituit. Quibus effectis armatisque diebus triginta, a quâ die materia cæsa est, adductisque Massiliam, his D.

Brutum præficit." Within a month after cutting down the timber he built and equipped twelve ships of war, and delivered them to Decimus Brutus, commander of the fleet that besieged Marseilles. The geographical position of the city at the bifurcation of the Rhône supplied great facilities for traffic by water-carriage. Moreover, in the immediate neighbourhood there was a great extent of shallow water, forming a kind of archipelago, which has now disappeared, but was formerly traversed by the *naves utricularie*, rafts supported by inflated skins. "Il y avait donc simultanément une flotte maritime, une flotte fluviale et une flotte paludéenne." Lenthéric, *Les Villes mortes du Golfe de Lyon*, p. 402 sq. See my Paper on "The Antiquities of Vienne," *Archæological Journal*, December, 1894, pp. 389-393. Appendix, *ibid.* June, 1895, p. 148 sq. The Inscriptions show that the inhabitants were not slow to profit by their natural advantages. Lenthéric, *Notes et Pièces Justificatives*, pp. 515-518. Inscriptions relatives aux anciennes corporations de marins et d'utriculaires. Five examples are given, but I quote the first *in extenso*, because it mentions three distinct corporations.

M. FRONTONI. EYPORI
 IIIIVIR. AVG. COL. IVLIA
 AUG. AQVĪS. SEXTIS. NAVICVLAR
 MAR. AREL. CYRAT. EIVSD. CORP
 PATRONO. NAVTAR. DRVEN
 TICORVM. ET UTRICLARIOR
 CORP. ERNAGINENSIVM
 IVLIA. NICE VXOR
 CONIVGI. CARISSIMO

Inscription trouvée dans l'église de Saint-Gabriel, *Ernaginum*, à deux lieues d'Arles. Lalauzière, *op. citat.*, Inserr. inserted between Text and Plates, p. xxvi, No. *179.

The *navicularii* were ship-owners; the *ratiarii* navigated rafts. Compare Hippolyte Bazin, *Villes antiques, Vienne et Lyon Gallo-Romains*, p. 104 sq., with references in the notes to Allmer and Hirschfeld.

At Narbonne, on the other hand, there was no navigation above the bridge (Pons Vetus), which connected the city with its suburb; accordingly we meet there with no trace of the *utricularii*, as in the region of the lower Rhône and Durance: Lenthéric, p. 220. See plates—(7) Narbonne moderne et ses anciennes Fortifications; (9) Les Iles et la Lagune de l'ancienne Narbonne; (11) Narbonis antiqui imago sub Imperio Romano et Gothico.

But the most striking testimony to the mercantile prosperity of Arles is borne by a State-paper issued, when that prosperity was tottering to its fall—destined soon to be overwhelmed by Gothic and Saracen invaders. In the year 418 Honorius published an edict by which he summoned an annual convocation of high officials and deputies from the seven provinces of Southern Gaul. It is interesting as an attempt at representative government, which, if made earlier, might have been successful. For our present purpose I cite the passage in which the Emperor states his reasons for choosing Arles as the place of assembly, and, not having access to the original,

I give the translation of Lalauzière, p. 56: "L'heureuse assiette d'Arles la rend le lieu d'un si grand abord et d'un commerce si florissant, qu'il n'y a point d'autre ville, où l'on trouve plus aisément à vendre, à acheter, et à changer le produit de toutes les contrées de la terre. Il semble que ces fruits renommés, dont chaque espèce ne parvient à sa perfection que sous le climat particulier, ne croissent tous que dans les environs d'Arles . . . On y trouve encore à la fois les trésors de l'Orient, les parfums de l'Arabie, les délicatesses de l'Assyrie, les denrées de l'Afrique, les nobles animaux que l'Espagne élève, et les armes qui se fabriquent dans les Gaules . . . Arles est enfin le lieu que la Mer méditerranée et le Rhône semblent avoir choisi pour y réunir leurs eaux, et pour en faire le rendezvous des nations qui habitent sur les côtes et sur les rives qu'elles baignent." *Gibbon*, Chap. XXXI, Vol. IV, p. 134 *sq.*, edit. Smith; note 190, he says that the correct text of this edict is published by Simond (*Not. ad Sidon. Apollin.*, p. 147.)

Arles holds a conspicuous rank in ecclesiastical, as well as civil, history, and the archbishop was one of the chief dignitaries of the Gallican Church. Here two Councils assembled: the former, A.D. 314, gave a decision on the African controversy, confirming the judgment already pronounced at Rome, in favour of Cæcilian and against Donatus—the rival candidates for the See of Carthage. This sentence produced the schism of the Donatists, which lasted, or rather raged, in Africa above three hundred years, "and was extinguished with christianity itself." "On fit (à Arles) plusieurs réglemens, entre autres, on défendit aux filles chrétiennes d'épouser des maris payens, sous peine d'être privées de la communion des fidèles: Lalauzière, p. 39. But this city was also connected with another controversy of more subtle nature and more widely diffused. At the Councils of Arles and Milan, A.D. 353–355, the Arians, supported by the Emperor Constantius, obtained a majority of votes for the deposition and condemnation of Athanasius.

There can be little doubt that some of the bishops and clergy, who attended these councils, were interred in the famous cemetery, called Aliscamps (*Elysii campi*), on the south-eastern side of the city, within a short walk from the Cathedral and Theatre. It is not necessary to describe it at length, partly because most of the monuments have been removed, and some of them enrich the museums of Rome, Lyons and Marseilles. The Romans had on this site an extensive Necropolis, which is proved by the number of objects found, bearing pagan emblems, at a considerable distance from each other. St. Trophime is said to have consecrated this enclosure as a place of Christian burial, and bodies were sent thither down the Rhône from many towns on its banks, even as remote as Lyons. Estrangin, *Études Archéologiques, Historiques et Statistiques sur Arles*, pp. 252–262, and Note XIII, p. 296, *sq.* Vers d'Ariosto et Dante Alighieri sur l'Elysée du Rhône. The ruined church of St. Honorat at the end of the Allée des Tombeaux deserves a visit, and the rows of ancient sarcophagi, as Stark observes, in their picturesque disorder, lying half or quite open, seem as if the Angel of the Last Judgment called to resurrection (*Auferstehung*) bones that had rested for centuries, some of them for more than a thousand years; *op. citat.*, p. 81.

Christian monuments may be regarded as the speciality of the

Museum at Arles; however, they are not the only attraction; it contains many fragments of different periods—bas-reliefs, parts of columns, capitals formed of acanthus leaves, funereal urns, &c. Among the more remarkable works of classical art we may notice an altar on the front of which Apollo is represented, seated, leaning on his lyre, with the Delphic tripod at his side, the remaining spaces being filled with branches of laurel (laurea donandus Apollinari, Horace, *Odes* IV, ii, 9); a statue of Mithras; round the body winds a long serpent, between whose folds the signs of the Zodiac are sculptured, engraved in Lalauzière, Plate III; also a colossal head of Augustus, executed in a fine style.

The inscriptions of Arles will be found in the volume of the *Corp. Inserr. Lat.* entitled Gallia Narbonensis, edited by Hirschfeld; he acknowledges the valuable assistance received from Monsieur Huart, the local antiquary.

Both Arles and Nîmes are near Aigues Mortes (Aquæ Mortuæ), a town which has preserved its mediæval fortifications better than any other in Europe. It would be preferable to make the excursion thither from the latter place, because the journey is shorter and the trains more convenient. By this plan the traveller would have about one hour's ride in the morning and afternoon, with a sufficient interval to walk round the walls, see the Tour de Constance, and explore the neighbourhood, so that he could return in the evening to his hotel at Nîmes, where the accommodation is excellent. Aigues Mortes is an unhealthy place; hence it is undesirable to pass the night there, and especially in the autumn the mosquitoes cause great annoyance. Speaking of Arles at this season, M. Huart said to me, "Nous sommes dévorés par les moustiques"; from a sanitary point of view Aigues-Mortes would be still more objectionable.

Fifteen towers rise above the ramparts, and nine gates afford the means of ingress or egress: the fortifications were constructed not by St. Louis, but by his son and successor, Philippe le Hardi, and remain intact as he left them; Lenthéric, Plate 13 — Enceinte d'Aigues Mortes; État actuel. Échelle de 1 à 8'000^m. It is not merely the wonderful preservation that attracts our attention, but the strong resemblance to the type adopted by the Crusaders for their fortresses and castles in the East, *e.g.*, at Antioch, Ascalon, and Caesarea. Of these, the first-mentioned is said to present the most striking analogy with Aigues Mortes — the arrangement of the enclosing walls and crenelated battlements being identical. *Ibid.* Plate XIV, Antioche au XIII^e siècle d'après un manuscrit du temps *Biblioth. Nat.*, No. 4939. As our Museums and Collections often exhibit in good condition a copy of some original, once famous but now lost, so here on Gallic soil stands a reproduction of a Crusaders' citadel now in ruins.

Among the towns in Southern France Carcassonne is the only one which can compare with Aigues Mortes for preservation. The former, however, being situated on an eminence overlooking the modern town, with its towers and walls, has a more picturesque appearance than the latter on level ground close to the water.

Again, Aigues Mortes has great historical interest, because at this place Louis IX, canonized as Saint-Louis, embarked for his second crusade, which was the seventh and last of these so-called Holy

Wars: Henri Martin, *Histoire de France*, Vol. IV, p. 326; Michaud, *Histoire des Croisades*, Vol. IV, p. 388 sq. From the statements of the former it appears that Aigues Mortes was as pestilential in the Middle-Ages as it is now. "Les délais des Génois avaient été très nuisibles à l'état sanitaire comme à la discipline de l'armée; les exhalaisons des marais d'Aigues Mortes engendraient des maladies dans le camp." But Lenthéric gives some additional details about the choice of this place for the departure of the fleet. The king was suzerain of the southern provinces of France; Narbonne and the other ports belonged to feudal lords having independent jurisdiction. Aigues Mortes alone was free, and Louis obtained it from the monks of Psalmodi, together with the lagoons extending from their abbey to the sea, in exchange for some crown lands near Sommière: Lenthéric, *op. citat.*, p. 364, and *Notes et Pièces Justificatives*, XIV, *Sur l'Île de Psalmodi*. The monastery was in an island of the Mediterranean, but the sea has retired, and is now two leagues distant. *Ibid.*, p. 506, XV, Acte de l'acquisition faite par Saint Louis de la ville et du territoire d'Aiguesmortes, des religieux du convent de Psalmodi, du mois d'Août 1248. This document is given in Latin and French, and begins thus: "De quitatione terræ de Aquis-Mortuis Domino Regi facta ab Abbate et conventu Salmodii et permutatione ipsius." St. Louis undertook the seventh Crusade with the view of converting the king of Tunis—"la chimère qui entraîna Louis vers les rivages maures." As a sovereign, he was wise and just; with the single exception of taking Damietta, his military career was a failure. Kehle bestows on him unqualified praise, Christian Year, Advent Sunday,

Like some bright angel o'er the darkling scene,
Through court and camp he holds his heavenward course serene,

but his friend and fellow prisoner (Joinville) "traced with the pencil of nature the free portrait of his virtues as well as of his failings." *Gibbon*, Chap. LIX, Vol. VII, p. 272, edit. Smith. Tillotson, in his celebrated "Sermon against Evil Speaking," makes some excellent remarks on the duty of forming a fair estimate of character—weighing the merits against the defects impartially.

Joinville took no part in the expedition to Tunis, and consequently does not include it in his memoirs; he only relates the instructions St. Louis gave to his eldest son, and the circumstances of his death, burial and canonization: Bohn's Antiquarian Library, *Chronicles of the Crusades*, pp. 524-531.

St. Gilles is distant eighteen kilomètres (about twelve miles) from Arles, and is the second station after that place on the line from Marseilles to Montpellier and Cette. It is known to architects and artists, but likely to be overlooked by the ordinary tourist. The portal of the church bears so strong a resemblance to St. Trophime, that, at first, in pictures and engravings, one might be mistaken for the other. Estrangin, *Études sur Arles*, devotes pp. 227-233 to the Église et Vis de Saint-Gilles, and quotes Prosper Mérimée's description of the façade (*Notes d'un voyage dans le midi de la France*). "Elle se présente comme un immense bas-relief de marbre et de pierre, où le fond disparaît sous la multiplicité des détails. Il semble qu'on ait pris à tâche de ne pas y laisser une seule partie lisse: colonnes,

statues, frises sculpturées, rinceaux, motifs empruntés au règne végétal et animal, tout cela s'entasse, se confond; des débris de cette façade on pourrait décorer dix édifices somptueux. La vis de Saint-Gilles est un escalier dont les marches portent sur une voûte rampante sur le noyau." *Vis* means a screw, and *escalier à vis* is a spiral staircase.

Estrangin says that the ancient name of St. Gilles was Rhoda Rhodiorum; a colony which the Rhodians founded on the banks of the Rhône, according to Pliny, Lib. III, Cap. IV. § 33, edit. Sillig. Now this passage does not by any means prove the identification; it only implies that Rhoda was east of Agatha (Agde, near Cette). Pliny is enumerating places in Gallia Narbonensis, in geographical order, advancing from West to East. His words are: "Oppida de cetero rara, præjacentibus stagnis: Agatha quondam Massiliensium et regio Volcarum Tectosagum atque ubi Rhoda Rhodiorum fuit, unde dictus multo Galliarum fertilissimus Rhodanus annis." From the similarity of the names *Rhodus* and *Rhodanus* he seems to have concluded that the Rhodians had colonized this part of Gaul. Some ancient authors were as rash as any moderns in making wrong derivations, and drawing false inferences from them. This place was also called Rhodanusia, and some authors suppose it to have been in the environs of Beaucaire, on the right bank of the Rhône, opposite Tarascon, and the supposition is corroborated by antiquities found there. Strabo often affords most valuable assistance, illustrating political history and archæology; but here he fails us, because the passage is corrupt. Lib. IV, Cap. I, Sect. 5, p. 180 (p. 149, edit. Didot). He is speaking of settlements made by the Massaliots. Ἀφ' ἧς καὶ τὰς πόλεις ἐκτίσαν, ἐπιτεχίσματα τὰς μὲν κατὰ τὴν Ἰβηρίαν τοῖς Ἰβηρσιν . . . τὴν δὲ τὴν ἑὲ τὸν Ῥόδον τῶν περὶ τὸν ποταμὸν οὐκ ὄντων βαρβάρων. Perhaps we ought to read Ῥοδανουσίαν.

It has been conjectured that Saint-Gilles, which is an inland town, occupies the site of Heraclea. Pliny's statement, "Sunt auctores et Heracleam oppidum in ostio Rhodani fuisse," does not contradict this opinion, as might at first sight appear, because the sea formerly extended further north than at present, and a large space, which is now dry land, was then covered by lagoons. So, in the twelfth century, the port of Saint-Gilles was a rendezvous of pilgrims embarking for the Holy Land.

It is almost necessary to append to a Memoir on the antiquities of Arles some notice of the *Canal of Marius*, especially as it became an important medium of commercial intercourse between that city and Marseilles. With this subject the Camp of Marius has a close connection, because the Fossæ Mariæ appear to have been originally constructed to victual the Roman army, which was awaiting in the interior the attack of the Teutones and Ambrones. Various opinions have been entertained concerning the position of this encampment: one French antiquary has even placed it in the Commune de Fos, on the shore of the Gulf of Lyons, and confidently regards his theory as not probable, but certain; *Congrès Archéologique*, Séances à Arles, p. 310. Some writers, however, maintain very plausibly that the camp was on the Plateau des Alpines, near Glanum (Saint Remy) or Ennagium (Saint Gabriel), not far from

the junction of the Rhône and the Durance (Druentia), where Marius would command an extensive view of the country, and have the advantage of communication by water. Plutarch, *Life of Marius*, Sect. XV, edit. Sintenis, Vol. II, p. 281 (edit. Reiske, II, p. 829), does not give exact information concerning the military position. We only learn from him that Marius entrenched his army near the Rhône (τοιχίσας στρατόπεδον παρὰ τῇ Ῥοδανῇ ποταμῷ), and that conveyance of provisions from the sea to his soldiers was long and expensive (μακρὰν καὶ πολυτελή). The embouchure of the river being blocked up by mud and sand-banks rendered the passage difficult for ships of burthen: on this account the Roman general made a cut, beginning near Fos on the Golfe de Fos (evidently named from *fossa*), and ending probably at the nearest point where the Rhône became navigable. This canal was afterwards continued as far as Arles—a work easily accomplished by utilizing the series of étangs parallel to the river.

Plutarch, *loc. cit.*, Ὁ δὲ . . . τάφρον μεγάλην ἐπέβαλε, καὶ ταύτῃ ταιρρον πολὺ μέρος τῶν ποταμῶν μεταστῆσας περιήγαγεν εἰς ἐπιτήδειον, ἀγριαν, βαθὴν μὲν καὶ ναυσὶ μεγάλας ἵσχυον. Λίαν δὲ καὶ ἄκλυστον στόμα λαβόνσαν πρὸς τὴν θάλασσαν. Comp. Strabo, Lib. IV, Cap. I, § 8, p. 183 (p. 152, edit. Didot).

Pliny, *Nat. Hist.* III, iv, Sect. 34, “Ultra (a Rhodani ostiis ortum versus) fossæ ex Rhodano C. Mari opere et nomine insignes, stagnum Mastramela oppidum Maritima Avaticorum, superque campi lapidei, Herenlis praeliorum memoria (*la Crau*).” See Sillig’s note; there is good manuscript authority for reading *fossæ* in the plural number, though Strabo, Pomponius Mela and Plutarch use the singular—*Congrès Archéologique*, Vol. *citat.*, p. 251, where attention is called to the discrepancy.

Pomponius Mela, II, 5, Sect. 78, edit. Parthey. “Inter enim (Massiliæ portum) et Rhodanum: Maritima Avaticorum adsidet, Fossa Mariana partem ejus annis navigabili alveo effundit.”

Ptolemy, alone among ancient authors, as far as I know, places the Canal of Marius on the west, or right bank of the Rhône. *Geographia*, Lib. II, Cap. 10, Sect. 2, edit. Car. Müller 1883.

Ἀραιῖος ποτ. ἐκβολαί

Arauris fluvii ostia

Ἀγάθη πόλις

Agatha oppidum

Σήτιον ὄρος

Setius mons

Φόσσαι Μαριάναι

Fossæ Marianæ

Ῥοδανὸν ποταμὸν τὸ ἐντικτὸν στόμα

Rhodani fluvii os ad occidentem vergens

Ῥοδανὸν τὸ ἀνατολικὸν στόμα

Rhodani fluvii os orientale

There can be no doubt that this canal was between Marseilles and the embouchure of the Rhône, so that Ptolemy or some transcriber must have made a mistake.

Itinerarium Provinciarum. Via Aurelia, a Roma per Tusciam et Alpes Maritimas Arelatum usque, ed. Wesseling, p. 299.

Massilia m p m XVIII.

Calcaria m p m XIII.

Fossis Marianis m p m XXXIII.

Arelate m p m XXXIII.

We have here another testimony to the great importance of Arles under the Empire.

Compare *Itinerarium portuum vel positionum navium ab Urbe Arelato usque*, ed. Wesseling, p. 507.

a Dilis Fossis Marianis. portus ..	m p m XX.
a Fossis ad Gradum Massilitanorum, fluvius Rhodanus	m p m XVI.

Here the word *Gradus* deserves attention; it means a landing-place or steps for getting in or out of ships, and is used like *scala* in the eastern part of the Mediterranean: see an excellent article by Mr. George Long, s.v., in Smith's *Dictionary of Greek and Roman Geography*. The copious article "Fossa Mariana," by the same writer, should also be consulted.

This signification of *gradus* will explain Grado, the name of a small island in the Adriatic, near Aquileia. Some modern gazetteers take no notice of it; but in the ecclesiastical history of Italy it appears prominently. The archbishops of Aquileia and Grado, which are within ten miles of each other, both claimed the primacy. Zandonati, *Guida storica dell' antica Aquileja*, p. 102, speaking of the election of the two rival patriarchs, A.D. 607, says, "Da queste elezioni ebbero principio le contese lungamente durate fra Patriarchi sul Primato delle Chiese Aquilejese, e Gradese." These disputes continued for centuries, and resulted, especially during the episcopate of Popone, in excesses which were even sanguinary.

See *Illustrierter Führer durch Triest und Umgebungen*, Zweite Auflage, 1886, published by Hartleben, Wien. Map, Golf von Triest (Aquileja) prefixed to Introduction (Einleitung), and Text pp. 49-51. The account of Grado is divided into two parts: 1. History. 2. The Cathedral (Dom), Church of St. Eufemia: the Mosaic, Patriarch's seat, and Pulpit are specially noticed. But I believe the best information, at least in our language, about Grado will be found in Mr. T. G. Jackson's book. *Dalmatia, the Quarnero and Istria*, 1887. Vol. III, Chap. XXXVI. pp. 406-439. The objects abovementioned are described, and peculiarities in the inscriptions pointed out.

I hope this digression will be pardoned, as it supplies deficiencies in my Paper on the "Antiquities of Pola and Aquileia," *Archæological Journal*, 1892, Vol. XLIX, p. 373 *sq.*

Lastly, the Pentinger Table, Segmentum II, 5, shows us on the coast east of the Rhône (Ostia Rhodani) a semi-circular building, open to the sea, with a roof of a reddish colour, somewhat like the tiles on modern Italian houses: both ends of the edifice are yellow, with pediments. The words "Fossis Marianis" are inscribed here. Estrangin, *Études sur Arles*, p. 265, says that the Table indicates a triumphal arch erected to commemorate the victories of Marius, or the opening of this new route of communication. His opinion is incorrect, and proved to be so by comparison with the harbour of Ostia in the same map, Segmentum V, 5, immediately under the figure of Roma seated, crowned, holding orb and sceptre. The semi-circular buildings were doubtless constructed, in both cases, for commercial purposes, viz., for receiving and storing cargoes, and probably also for custom-house offices. In the Table, as we might expect, the vignette of the canal of Marius is much more simple than

that of the harbour at Ostia; the latter distinguishes clearly the Portus Augusti (so-called, though it was begun by Claudius) from the Portus Trajani—the inner basin; it also represents the light-house as an isolated tower, quite separate from the two moles (*brachia*) “projecting into the sea so as to enclose an extensive space.” The table of Peutinger should be studied in the edition of Dr. Konrad Miller, entitled *Die Weltkarte des Castorius*—partly, because the colours of the original are reproduced, also because the map is accompanied by an introductory brochure (*Einleitender Text*) in which the various symbols are explained, *e.g.*, those denoting different classes of cities, Imperial residences and chief fortresses. For the present purpose see especially p. 95, Seehafen, Es ist kein Zweifel dass Castorius in dieser Vignette den Portus Claudii und den Portus Trajani unterscheiden will.

Two of the most important ancient authorities for Ostia are Suetonius, Claudius, Cap. 20, “Portum Ostiæ exstruxit . . . congestisque pilis superposuit altissimam turrim in exemplum Alexandrinæ Phari, ut ad nocturnos ignes cursum navigia dirigerent.” Compare Juvenal, *Satire XII*, 75–81, Tyrrhenamque Pharon with the Scholia, and long note by Heinrich on v. 75. See also the following modern authors:

Gibbon, Chap. XXXI, notes 88–90; edit. Smith, Vol. IV, p. 97 *sq.*

Eckhel, *Doctrina Numorum Veterum*, Vol. VI, p. 276, coin of Nero described.

Admiral Smyth, *Roman Imperial Large Brass Medals*, p. 42, says of the harbour, “From a survey which I made of its ruins in 1823, it must have been an undertaking as gigantic as it was useful.”

Cohen, *Médailles Impériales*. Vol. I, p. 187 *sq.*, Nos. 91–98. Legend of the Reverse: 91, AVGVSTI (en haut), PORT OST (dessous). L'enceinte des murs du port d'Ostie . . . dans l'intérieur onze navires, Planche XII.

Smith, *Dictionary of Greek and Roman Geography*, Vol. II, p. 502, “Plan of Ostia,” Article by Sir E. H. Bunbury.

Agde, one of the Villes mortes du Golfe de Lyon, exemplifies the use of etymology in illustrating history. It is situated at the embouchure of the Hérault (Arauris), which gives its name to the Department, south-west of Cette, and near Béziers (Biterræ), a place praised by Pliny for producing good wine; *Nat. Hist.*, XIV, vi, 68, “Beterrarum intra Gallias consistit anctoritas; de reliquis in Narbonensi adseverare non est”: he censures the other wines of Southern Gaul for being adulterated; and most travellers have had opportunities of observing that this ancient practice has not been discontinued. In another passage, III, IV, 36, he mentions this place with other military colonies, “In mediterraneo coloniæ Arelate sextanorum, Beterræ septimanorum, Arausio (Orange) secundanorum.”

The ancient name of Agde was Agatha, with some slight variations, as Ἀγαθὴ πόλις, or in one word Ἀγαθήπολις. Strabo informs us that it was a colony of Marseilles, Lib. iv, Cap. I, Sect. 6, ὁ Παύραρις . . . ἐφ' ὃν Ἀγάθη, κτίσμα Μασσαλιπτῶν. Similarly Scymnus

Ἡερήγγησις, Orbis Descriptio, in *Geographi Minores*, edit. Didot, Vol. I, p. 204,

Οἱ Μασσαλίων κτίσαντες ἔσχον Φωκαῆς
Ἀγάθην Ῥοδανουσίαν τε, Ῥοδανὸς ἦν μέγας
Ποταμὸς παραρρεῖ.

Agatha means the good city, and has reference to the secure harbour in which the Greek mariners, and probably the Phœnicians before them, found refuge from the storms prevailing in this part of the Mediterranean. A volcano, St. Loup, 115 mètres high, now extinct, protected them against the blasts of the mistral; and the Cap d'Agde, a neighbouring promontory, by its shelter contributed to procure them a comparatively safe anchorage. Here, according to Avienus cited by Lenthéric, they might enjoy a halcyon rest after their labours and dangers,

Nunquam excitentur fluctuum volumina,
Sternatque semper gurgitem Alecyone quies.

There can be little doubt, if we consider the changes undergone by the line of coast, that in ancient times there was a much better roadstead than at present.

Some words now used by the population in this locality show that at one time subterranean fires were active here: the crater is called *fournaiguère* (*fourier, fournier, journaise*) or *fumiguère*, and the slopes of the mountain, *la grande et la petite crémaude*, i.e. *brûlée*; and the name *Peyre de Riouré*, "pierre de la montagne de feu," is supposed to be derived from a Phœnician origin. The town of Agde has a gloomy appearance, being built of lava, and in this respect resembles constructions at Clermont-Ferrand in the volcanic region of Auvergne.

Agatha was the name of the *island* also, over against which the town was situated, according to Ptolemy, II, X, § 9: *Νῆσοι δὲ ἐποικίζονται τῇ Ναρβονησίᾳ, Ἀγάθη μὲν κατὰ τὴν ὀμνέντομον πόλιν . . . μεθ' ἣν Βλασκήν* (Brescon). *Insulæ sunt infra Narbonensem Agathæ e regione urbis ejusdem nominis . . . et post eam Blasco* (*hodie Breseou*). Compare Pliny, *Nat. Hist.*, III, v, § 79, *Galliæ autem ora in Rhodani ostio Metina, mox quæ Blascon vocatur*.

Lenthéric, p. 272, says that all the money of Agde has the Marseilles type—*obverse*, face of Diana; *reverse*, lion; but we must not too readily accept this attribution, as some of the most learned French numismatists have opposed it, and the animal appears to be a ram rather than a lion. See *Catologue des Monnaies Gauloises de la Bibliothèque Nationale*, par Muret et Chabonillet, 4to, p. 47. It is there stated that the mistake was made by De la Saussaie, and corrected by the Marquis de Lagoy.

See Heiss, *Monnaies antiques de l'Espagne*, p. 433: *Monnaies avec des légendes Celtibériennes émises dans la Gaule Narbonnaise*. 1 Ontiga, Agatha? (Agde), fig. 3.

La légende . . . qui se transcrit ONTHGA, peut être la contraction du mot ONA THE GNIA, qui signifie en basque "le bon lien." *ona* bon, et *teguia*, affixe de lien. Cette qualification de *bon* ou de *bonne*, s'exprimait en grec par Ἀγαθός ou Ἀγαθή, nom que portait autrefois la ville d'Agde, située sur le territoire des Volkes Aréoc-

miques. . . . Ainsi l'attribution de notre pièce à la ville d'*Agatha* semble indiquée par la provenance, les types, la fabrication et même par la concordance des noms.

The coins of Marseilles are best studied in the catalogue above-mentioned, issued by the Ministère de l'Instruction publique et des Beaux-Arts, and accompanied by the Atlas of M. Henri de la Tour, Nos. 496-2125, text pp. 11-44. This list includes the barbarous imitations, and money struck by cities dependent on Marseilles. Diana and the lion are by far the most frequent devices. Besides a bow and quiver, the goddess is often represented wearing earrings and a necklace of pearls, just as Juvenal in a remarkable passage describes a rich Roman lady.

Satire VI, vv. 457-460,

Nil non permittit mulier sibi, turpe putat nil,
Cum virides gemmas collo circumdedit, et cum
Auribus extentis magnos commisit clenchos.
Intolerabilius nihil est, quam femina dives.

Heinrich, *in loco*, suspects the last line to be spurious; compare the note in Otto Jahn's critical edition of the text. Also see Rupert's note and Gifford's Translation Vol. I, p. 253, where he quotes Seneca, *De Beneficiis*, VII, 9; and for female ornaments of this kind, Böttiger's *Sabina*, second edition, Vol. II, Siebente Szene, pp. 129-122; Anmerkungen, pp. 151-157.

Other types are,—head of a seal (*φώκη*), with reference to the city being a colony from Phocæa (Comp. *Thucydides* I, 13, and Bachr's note on *Herodotus* I, 166), griffin, crab, wheel, head of the river (or rather port) Laeydon, head of Apollo, head of Minerva, bull butting, caduceus, galley, dolphin and trident—the last three symbolizing the maritime and commercial importance of Marseilles are peculiarly appropriate. Obols and drachms abound in this series, but no multiples of the latter—such as didrachms and tetradrachms—have been found hitherto.

The beautiful coinage of Massilia harmonizes well with the praise of this city, as a seat of Greek civilization and refinement, which we read in Cicero pro Flacco, XXVI, 63, "Neque vero te, Massilia, prætereo . . . ejus ego civitatis disciplinam atque gravitatem non solum Græciæ, sed hand scio an eunctis gentibus anteponendam dicam." Compare Tacitus, Agricola Chap. 4, "Quod, statim parvulus sedem ac magistræ studiorum Massiliam habuit, locum Græci comitate et provinciali parcimonia mistum ac bene compositum." *Id. Annals*, IV, 44. Strabo, Lib. IV, Cap. I, *Gallia Narbonensis*, Sect. 5, edit. Didot, pp. 179-181. Ἐν τῇ τῆς παρόντι (ἀντὶ ἡ πόλις) καὶ τοῖς ἡρωισμοῦ τῶν Παριίων πέπεικεν, ἀντὶ τῆς εἰς Ἀθήνας ἀποδημίας ἐκείσε φροτῆρ, φιλομαθεῖς ὄντας.

Those who have not access to the expensive French Description of Gaulish money will find specimens in *Hunter's Catalogue* by Taylor Combe, Text pp. 190-194, Table XXXVI, Figs. 1-16; Nos. 40-44 in the text nummus fabricæ barbaræ. This work has a great reputation for general accuracy, and is a decided improvement on its predecessors; but as might be expected in a book containing so many examples, mistakes have been detected by subsequent writers. A list of corrections is given in the *Numismatic Chronicle*, 1896, No. 62

pp. 144-154: Article by Mr. G. Macdonald, which appears to have been compiled as a supplement to memoirs by Friedländer in the *Wiener Numismatische Zeitschrift*, 1872, and by Imhoof-Blumer in the *Berliner Zeitschrift für Numismatik*, 1874.

E.g. *Numism. Chron.*, loc. citat., p. 148, it is stated that Combe has Falisci (ethnic name for Falerii) No. 12, instead of which Axos should be substituted. Combe's description is, "Caput barbatum et laureatum ad dextram, Rev. FA Tripos: supra fulmen et KPA." Comp. Pashley's *Travels in Crete*, 1837, Vol. I, p. 156, three copper coins of similar type; p. 157, one silver. The mistake was made from not understanding the first letter on the reverse, which is the Digamma: and it is the less excusable, as the use of this character in *Homer* had been discovered and fully explained by Bentley long before. See his life by Dr. Monk, Bishop of Gloucester, Vol. II, pp. 360-367; and compare Key on the *Alphabet*, pp. 26, 60-62. Our British Aristarchus said that the digamma was equivalent to the English *w*, and this opinion has been generally adopted. Herodotus, IV, 154, says: "Ἔστι τῆς Κρήτης Ἀξὸς πόλις, ἐν τῇ ἐγένετο Ἐπάρχους Βασιλεὺς." An inscription gives *Favξos*, and the coins *Fáξos* or **Αξος*: See Head, *Historia Numorum*, p. 387. So we have in Virgil, *Eclogue*, I, v. 66,

rapidum Cretæ veniemus Oaxen.

(see Forbiger's note, which refers to Meursius and Spohn), a river homonyms with the city. The poet's epithet is accurate, for Pashley informs us that after rain the stream becomes a torrent and impassable. It has been suggested that the form *Oaxus* might have arisen from some difficulty in pronouncing the Digamma: for some varieties, see Eckhel, *Doctrina Numorum Veterum*, Vol. II, p. 305 sq. So in French, *ou* in the word *oui* sounds the same as *w* in the English *we*. Compare *ὄικος*, *vicus* and the English termination *wick* or *wich* in the names of places.

Pashley, Cap. VIII, "Visit to the site of Axos," and Admiral Spratt's *Travels and Researches in Crete*, 1865, Vol. I, p. 16, and coloured plate, View of Mount Ida; Vol. II, pp. 75-83, lithograph intercalated on p. 75, View of Axo. The writings of both these authors have a special interest at the present time (February, 1897), while the civil war between Christians and Mohammedans is raging in the island. Admiral Spratt was a pioneer to explorers in the Mediterranean, and his book supplies much information, both literary and scientific, that will not be found in the work of his predecessor. It is illustrated by maps of the Eastern and Western Parts of Crete, coloured for geological reference. A brief obituary notice of the Admiral's labours and services appears in the President's Anniversary Address at a meeting of the Society of Antiquaries, April 23rd, 1888. Compare *British Museum Catalogue of Greek coins—Crete and Ægean Islands*, 1886, Axos, text p. 14 sq., Plate III, Figs. 12-19; Crete, pp. 1-80, Plates I-XIX. This volume contains an Introduction, pp. 1-L.

I think Combe has improperly ascribed to "Axia in Italia" coins that belong to Axos in Crete. *Hunter's Catalogue*, p. 65, *FAΞION* tripus, fulmen alatum, caput barbatum et laureatum, etc. Tab. XII, Figs. 26, 27. The former town is mentioned by Cicero, *Oratio pro Cæcina*, Cap. VII, § 20, "Cæcina cum amicis ad diem venit in castel-

lum Axiam, a quo loco fundus is, de quo agitur, non longe abest." Here the word *castellum* should be noticed, because it corresponds with Castel d'Asso, called by the peasantry Castellaccio, about five miles from Viterbo. *Ibid.* Cap. X, Sect. 28, it seems to be stated that Axia was less than fifty-three miles distant from Rome, "minus [abesse] LIII"; but this reading, though adopted by Orelli, has been rejected by the later editor Baiter, who gives us the text as follows, "Nam cum dixisset, minus 1000, populus cum risu acclamavit, ipsa esse"; which makes the passage more intelligible.

For "the long line of cavern-sepulchres" at Castel d'Asso, unparalleled in Europe, see Dennis, *Cities and Cemeteries of Etruria*, Chap. XV, pp. 229-241; p. 228, Plan of Castel d'Asso and its Necropolis; lithograph facing p. 235, Valley of Tombs; Mrs. Hamilton Gray, *Sepulchres of Etruria*, Chap. VIII, pp. 380-408. The lady's description is less learned, but more lively. She has the merit of being the first to introduce Etruscan antiquities to the curiosity of the English public.

Under the heading "Falisci" Combe, *op. citat.*, Text p. 142 sq. (Tab. XXVII, Figs. 16-25), has made a mistake more glaring than those already mentioned: he has attributed to this Italian people coins that belong to "the series issued at Elis—one of the most important of Greek autonomous currencies." They bear the legend FA, where we have the Digamma, not the Roman letter F. *British Museum Catalogue of Greek Coins*, Peloponnesus (excluding Corinth), Elis, Introduction pp. XXXV-XXXVIII, Text pp. 58-76. Pls. X-XVI. The symbols of Olympian Zeus—eagle devouring a hare or some other animal, as an omen of victory, and thunderbolt surrounded by an olive wreath, are usual types: the head of Hera is in a style worthy of the best period of art. FA occurs most frequently, but we also meet with the name in *extenso* FAΔEION, sometimes on the diadem. Head, *Historia Numorum*, pp. 343, 353 *seqq.* chronological table, Figs. 226-236. Mr. Head says that the wreath is of the wild olive—Virgil, *Georgics* II, 182; *oleaster*. St. Paul's Epistle to the Romans, xi, 17 and 24, ἀγρίλαιος as opposed to καλλιλάιος.

In Lindley and Moore's *Treasury of Botany*, Part II, p. 810, s.v. *Olea*, it is stated that the branches of the wild olive are more or less four-sided and spiny, the leaves oblong or oval, and the fruit small and valueless; the cultivated olive has roundish, unarmed branches, lance-shaped leaves, and large oily fruits. Now, the *British Museum Catalogue*, s.v. Elis, Plate XI, Fig. 9, shows a good example of oval leaves on a coin, corresponding with this distinction. Martyn in his edition of *Virgil, Georgics*, *loc. citat.* p. 146, remarks that the oleaster seems to be different from the cultivated sort, only by its wildness, as crabs from apples; but though he was Professor of Botany at Cambridge, I think he is mistaken. Martyn's Plate facing p. 146 does not accurately represent the gray colour of the olive, which is a striking feature in Italian scenery, where the classical tourist is often reminded of Juvenal's line XIV, 144,

Arbusta et densa montem qui canet oliva.

The olive is said to have been introduced by the Phœceans into Marseilles. C. Knight's *Cyclopædia of Natural History*, Vol. IV., cols. 80, 81.

One would suppose that a mere tiro in numismatics would not have ventured to attribute to a comparatively obscure town in Italy types whose artistic excellence is not surpassed by those of any other Grecian state. But the error is not confined to *Hunter's Catalogue*; it appears also in *Mionnet*, and even in *Eckhel, Doct. Num. Vet.*, Vol. I, pp. 90-92, s.v. Faleria. Leake corrects it, *Numismata Hellenica*, European Greece, p. 49, s.v. Elis.

To return from this digression, and revisit Agde—a dead city on the Gulf of Lyons—at present the only object that would interest an antiquary is the church. It belongs to a series of buildings on the shores of the Mediterranean, in which a temple was combined with a citadel. “On priaît dedans et on se battait dessus; les femmes, les enfants et les infirmes étaient enfermés, le jour du danger, dans la grande nef, et les hommes valides, abrités par les créneaux de la terrasse dallée, défendaient l'accès de la place et soutenaient l'assaut.” (Lenthéric, p. 280.) This church seems to have been erected on the foundations of a heathen edifice, probably dedicated to the Ephesian Diana (Artemis). Lenthéric, p. 279, enumerates églises fortifiées at Narbonne, Vie-Mireval, Maguelone, Frontignar, and Saintes Maries. Their frequency is easily accounted for, as the coast was exposed to the attacks of Mahometan pirates from Spain and Africa.

Lenthéric devotes his tenth chapter to Maguelone, pp. 333-349, and relates its history. The principal events were the destruction of the town by Charles Martel, A.D. 737, its restoration in the eleventh century, and second destruction by Louis XIII and the States General of Languedoc. Nothing now remains except the grand nave of the ruined Cathedral. *Ibid.* *Pièce Justificative* XII, pp. 495-497, gives an interesting account of the hospitality exercised by the canons of Maguelone. It consists of an extract from the statutes of 1331—*De preposito*. The coinage of the Bishops deserves a passing notice, for they, like other Christian princes in these parts, issued a currency with Mahometan types and Arabic legends, doubtless because it was the most convenient medium of exchange in the Mediterranean. One of these dignitaries was reproved for his offence in a letter by Pope Clement IV, 16 September, 1266, “*Quis enim catholici non monetam debet eudere cum titulo Mahometi?*” The traveller can easily reach Maguelone, being scarcely two kilomètres from Palavas, which is less than half an hour's ride by railway from Montpellier, and a *faubourg maritime* of that city; see *Indicateur des chemins de Fer*, p. 84—G, Août 29th, 1896. To the list given above we may add the church of Luz—a village in the Pyrenees, between Pierrefitte (Railway station) and Gavarnie—which I have already noticed, and compared with Cornac's chapel on the Rock of Cashel, *Archæol. Journ.*, Vol. XXXVI, p. 29, text and notes. Joanne, *Guides Diamant, Pyrénées*, p. 140, Route 94, Luz et Saint-Sauveur, with map facing this page, and including St. Sauveur, Barèges, Bagnères de Bigorre. Église crénelée et fortifiée, bâtie au XII^e siècle (?) par les Templiers. Luz, which is in the Department Hautes-Pyrénées, must not be confounded with Saint-Jean-de-Luz (Basses-Pyrénées), a frontier town in the direction of Spain, and frequented watering-place.

This Paper, like some of its predecessors, is the result of a journey

in the South of France. I subjoin a list of the most important among the authorities that I consulted after my return.

Strabo, *Geographica*, edition published by Didot, Paris, 1853; Lib. IV, Cap. I. Gallia Narbonensis, pp. 146-157.

Ptolemy, *Geographia*, edit. Car. Müller, Paris, 1883, with a copious and instructive commentary, Lib. II, Cap. X, The same part of Gaul, pp. 233-247.

Pomponius Mela, *De Chorographia*, edit. Parthey, 1867; Lib. II, §§ 74-84.

Itinerarium Antonini Augusti et Hierosolymitanum, edit. Parthey and Pinder, 1848. The former of these books is divided into two parts—*Itinerarium provinciarum et maritimum*, v. especially pp. 242-249 (edit. Wesseling, pp. 497-508). *Itinerarium portuum vel positionum navium ab Urle Archelato usque*.

Corpus Inscriptionum Latinarum, Vol. XII.

Hippolyte Bazin, *Nîmes Gallo-Romain, Guide du Touriste-Archéologue*, Paris, 1892.

De Noble Lalauzière, *Abrégé Chronologique de l'Histoire d'Arles*, 1808.

J. J. Estrangin, *Études Archéologiques, Historiques et Statistiques sur Arles*, 1838.

Id. *Description de la ville d'Arles antique et moderne, avec une Introduction historique*, pp. I-XLIX, 1845.

The *Description* is not a mere repetition of the *Études*; it contains an account of antiquities discovered in the interval that elapsed between these two publications, and a much greater number of lapidary inscriptions is inserted in the text.

Edmond Le Blant, *Étude sur les sarcophages chrétiens antiques de la Ville d'Arles*, Paris, 1878, fol., published by the Minister of Public Instruction, in the Collection de Documents inédits sur l'histoire de France, Troisième Série, Archéologie. The book consists of Part I, a learned Introduction pp. I-XXXIX, with many useful references to the writings of De Rossi, Caylus, Garrucci, Rénan, Bottari, Lenormant, Winckelmann, etc.; and Part II, Explanation of the bas-reliefs illustrated by Plates I-XXXVI. This valuable work which I have freely used deserves to be better known by our fellow-countrymen, and I beg leave to take this opportunity of directing their attention to it.

Charles Lenthéric, *Ingénieur des Ponts et Chaussées, Les Villes Mortes du Golfe de Lyon. Illiberris—Ruscino—Narbon—Agde—Maguelone—Aiguesmortes—Arles—Les Saintes-Maries*. Ouvrage renfermant quinze cartes et plans, 1889. My obligations to the author must have already been apparent to every reader of the present Memoir.

Congrès Archéologique de France, XLIII^e Session. Séances Générales tenues à Arles en 1876, par la Société Française d'Archéologie pour la conservation et la description des monuments, 1877. The volume consists of 932 pages 8vo, and contains forty-seven engravings: *vide* Index des Gravures at the end. Besides the Papers already referred to, it includes others on Ethnology, Prehistoric Times,

the Middle Ages, and Unedited Documents : *vide* Table Méthodique, pp. 924-930.

Collection des Guides-Joanne—Provence, Alpes Maritimes, Corse—avec quinze Cartes et six Plans. This excellent series has many merits. In one respect it surpasses most books of the same kind. To each volume a bibliographical Article is prefixed (Principaux ouvrages consultés), under two headings : 1. Généralités ; 2. Départements.

P.S.—The traveller cannot fail to observe the embankments (*digues*) by which the Rhône is confined in the lower part of its course. It is obvious that they protect the towns on its banks from inundations ; but on the other hand, this advantage has been dearly purchased. If the river had been allowed to spread, as was the case under the Romans it would, like the Nile, have fertilized the land by alluvial deposits, and the inhabitants of the Camargue and the country round Arles would not have suffered from the miasma of marshes imperfectly drained, which bring to our recollection the Greek oracle that became a proverb,

Μὴ κίνει Καμάριναν. ἀκίνητος γὰρ ἀμείνεν.

For this subject see Lenthéric, Chapitre Troisième, Étude comparative des trois grands deltas de la Méditerranée, pp. 39-75 ; *cf.* Chapitre douzième, Aspect du delta et de la plaine avant l'établissement des digues du Rhône, pp. 392-397. Also compare Brugsch, *History of Egypt*, coloured map at the end of the Second Volume, English translation. *Aegyptus antiqua*, Map of Lower Egypt comprising twenty Nomoi (provinces).

NOTES ON THE BENEDICTINE ABBEY OF ST. PETER AT GLOUCESTER.

By W. H. ST. JOHN HOPE, M.A.

The first record of the abbey of Gloucester is that of its foundation by Osric in 681, in honour of God and St. Peter.

Like many other pre-Norman monasteries it was a double one for men and women, under the rule of an abbess.¹

Of the plans of such monasteries we know very little, but if the contemporary abbey of Abingdon may be taken as a pattern, they consisted rather of a number of little houses, with the church as a centre, than of a connected group of buildings like the Norman monasteries of Canterbury, Gloucester, Worcester and elsewhere.

Of Osric's church at Gloucester we know that it contained, beside the high altar of St. Peter, an important altar of St. Petronilla on the north side, before which the founder and the first three abbesses were buried.²

With the death of the third abbess in 767 this monastery came to an end.

After lying waste for fifty years, Bernulf, king of the

¹ "Anno ab incarnatione domini DC^{mo}lxxxj^o. . . . Osrichus ex licencia Regis Ethelredi ex possessione sua in civitate Gloucestrie monasterium cenobiale in honore sancti Petri apostoli nobiliter construxit et ibi Keneburgam sororem suam abbatissam constituit," etc. *Cott. MS.* Domitian A. viii. f. 125b. [Printed in *Historia et Cartularium Monasterii Sancti Petri Gloucestriae*, ed. W. H. Hart (Rolls Series, 33), 1-3 et seqq.]

² "Anno domini DCCvii^o. Kenred rex [*sic*] Northanhymbrorum Rex moritur cui Rex Osricus successit qui dudum Gloucestresem monasterium condiderat .vij^o. Idus Maii mortuus est anno regni sui .xij^o. et sepelitur in ecclesia sancti

Petri coram altari sancte Petronille in aquilonari parte ejusdem monasterii anno domino DCC^oxxix^o." *Ibid.* f. 126; and Hart, i. 5.

"Kyneburga soror regis Osrici sepelitur juxta fratrem suum Osricum coram altari sancte Petronille ejusdem monasterii."

Edburga, the second abbess, died in 735 and "juxta predecessorem suam et sororem Kyneburgam sepulture tradebatur."

Eva, the third abbess, died in 767 and "juxta sorores et predecessores suas in eodem monasterio tradebatur sepulture." *Ibid.* f. 126a and 126b; and Hart, i. 7.

Mercians rebuilt the monastery, and converted it into a foundation of secular canons.¹

These canons existed until 1022 when, to quote Leland's quaint statement, "Kynge *Canute* for ill lyvyng expellyd Seculer Clerks, and by the Counsell of *Wolstane* Bysshope of *Wurcestar* bringethe in Monkes."²

The Benedictines thus introduced by Cnut do not seem to have been a success, and after an existence of thirty-seven years under a weak abbot, whose long rule was marked by great decay of discipline, the *Memoriale* says, "God permitted them to be extirpated, and the monastery in which they were established to be devoured by the fiercest flames, and the very foundations and buildings to be rent as under, razed to the ground, and utterly destroyed."³

The monastery was next taken in hand by Aldred bishop of Worcester, who in 1058 re-established the monks. He also began to build a new church from the foundations and dedicated it in honour of St. Peter.⁴

Until now the monastery seems to have occupied the same site throughout its checkered history, but the *Memoriale* states that Aldred began the new church "a

¹ "Post obitum Eve ecclesia hec reetrie et regimine destituta a morte ejusdem Eve usque ad regnum Bernulphi Merciorum regis quinquaginta nempe annorum spatio deserta manet et desolata. Bernulphus autem Merciorum princeps cenobium Gloucestreense spoliatum et ruinosum inveniens et ex singulari regalique cura promovere studens monasterium Gloucestreense reedificavit et formam ejus mutavit. Canonicos seculares qui predicatorum et clerici fuerunt legitimis uxoribus plerosque junctos et conjugatos vietuque ac habitu ab aliis secularibus Christianis parum discrepantes ibidem collocandos curavit," etc. From *Memoriale Ecclesie Cathedralis Gloucestrie Compendarium, penes Dec. et Cap.* Printed in Dugdale, *Monasticon Anglicanum*, ed. Caley, Ellis, and Bandinel (London, 1817), i. 563.

The original of this important document cannot now be found. An English translation of it, *temp.* James I. is in Lansdowne MS. 681, f. 16.

² *The Itinerary of John Leland the Antiquary.* By Thomas Hearne, M.A. (Oxford, 1744), viii. 32. This hardly agrees with the account in the *Memoriale* that "A Bernulphi Merciorum regis regno hec ecclesia sub clericis usque ad regnum Canuti Anglorum regis pacatissime et felicissime floruit." Dugdale, i. 563.

³ "Postea vero cum monasterium Gloucestreense hos monachos Benedictinos nulla salvifica scientia nec salutari conscientia imbutos sed tenebris plus quam Cymmeriis obsecratos et contra fidem et officium Christi tanquam insensatos desperientes recepisset, Deus glorie sue zelotypus illos extirpare et monasterium quo stabulabant flammis devorari crudelissimis, ipsaque adeo ejus convelli fundamenta ac ædificia solo adæquari et penitus dirui permisit." *Memoriale* in Dugdale, i. 564.

⁴ "Aldredus ecclesiam illam a fundamentis construxit de novo, et in honore principis Apostolorum Petri honorifice dedicavit." *Cott. MS.* Domitian A. viii. f. 127.

little further from the place where it had first stood and nearer to the side (*lateri*) of the city."¹

The Rev. W. Bazeley, in an interesting paper communicated to the Bristol and Gloucestershire Archaeological Society in 1888,² suggests that Osric's monastery stood within the north angle of the Roman town wall, on the site of the quire and presbytery of the present cathedral church, and that in the days of Edward the Confessor the Roman wall was destroyed and the site extended beyond it to enable Aldred to build his new monastery.

This is a very possible state of things, but the language of the *Memoriale* seems to point to an entirely new site having been selected for the church, not "nearer the bounds" but nearer the "side" (*lateri*) of the town.

Even under Aldred's auspices the monastery did not altogether flourish. But this time it was through the fault of Aldred himself, for on his translation to York in 1060 he retained very many of the possessions of the abbey that had been pledged to him on account of his expenses in repairing and re-edifying the church.

In 1072 Wilstan, the abbot consecrated by Aldred in 1058, died, and was succeeded by Serlo, who found the convent reduced to two monks and eight novices.

The new abbot was however not dismayed by the poverty of the house or the fewness of its inmates, and through his energy the numbers so increased that before his death there were a hundred monks, and by the favour of William the Conqueror he recovered all the lands that had been pledged to archbishop Aldred.

With the increase in numbers it became necessary to rebuild the monastery. On the feast of the apostles Peter and Paul in the year 1089 the bishop of Hereford laid the foundation stone of the new church.³

This church, which, according to the Chronicle "abbot Serlo had constructed from the foundations" was dedicated on July 15, 1160, by the bishops of Worcester,

¹ "Aldredus Wigornensis episcopus ejusdem ecclesie novum inchoavit fundamentum a loco quo prius steterat paulo remotius et urbis lateri magis contiguum." Dugdale, i. 564.

² *Transactions of the Bristol and Gloucestershire Archaeological Society*, xiii. 160, 161.

³ "Anno m^olxxxix^o. In die festivitatis apostolorum Petri et Pauli hoc anno Glovernensis ecclesie locatur fundamentum venerabili viro Roberto Hertordensi episcopo primum lapidem in eo ponente, agente dompno Serlone abbate." *Coll. MS.* Dom. A. viii. f. 128; Dugdale, i. 543; and Hart, i. 11.

Rochester, and Bangor, and another for whose name a blank is left.¹ This does not necessarily imply that the whole church was built, but so much of it as could be used for the monks' services, probably the presbytery, quire, and transepts, and one or two bays of the nave. The other parts of the church would be in various stages of erection.

To the church begun by Serlo there can I think be little doubt, from comparison with contemporary buildings, that the crypt and most of the Norman superstructure of the present building belong. It is not stated that Serlo also began the monastic buildings, but the passage next the north transept, as well as part of the chapter house, is quite as early as his time, and there are good grounds for assuming that the cloister and other buildings round it were set out by him. Into the later history of the church I do not now propose to enter.

There are one or two statements, however, in the *Memoriale* touching the old monastery that must not be passed over. One is that Edward the Confessor held a Witan at Gloucester, "at the time when the Danes were expelled," "in the old building of this monastery now called the long workshop (*nunc longa opificina appellato*)." Henry I. is also said to have held the first Parliament since the Conquest "in that very ancient building," and Edward I. held a royal assembly in the same place.² I do not know where this building stood, but Mr. Bazeley tells me he has found entries referring to it so late as the reign of James I.

A great Benedictine abbey like that of St. Peter's Gloucester, usually consisted of several groups of buildings laid out on a set plan which was always more or less closely followed, any important deviation being generally due to peculiarities or exigencies of site.

¹ "Anno Domini M^o.C^o., idus Julii die dominica ecclesia quam venerande memorie abbas Serlo a fundamentis construxerat Glovernie ab Episcopis Sampsona Wygorniensis, Gandulpho Rovensi, et Heurevo [*sic*] Bancornensis dedicata est magno cum honore." *Cott. MS. Dom. A. viii. f. 128*; Dugdale, i. 544; and Hart, i. 12.

² "Edwardus ille Confessor Glouce-

triæ commoratur et in antiquo hujus monasterii edificio, nunc longa opificina appellato, tempore quo Dani expelluntur senatum habuit saluberrimum. . . . Primum a conquestu parliamentum per Henricum primum in illa antiquissima hujus monasterii structura celebratum et in eodem loco Edwardus primus . . . senatum habuit satis regium." Dugdale, i. 564.

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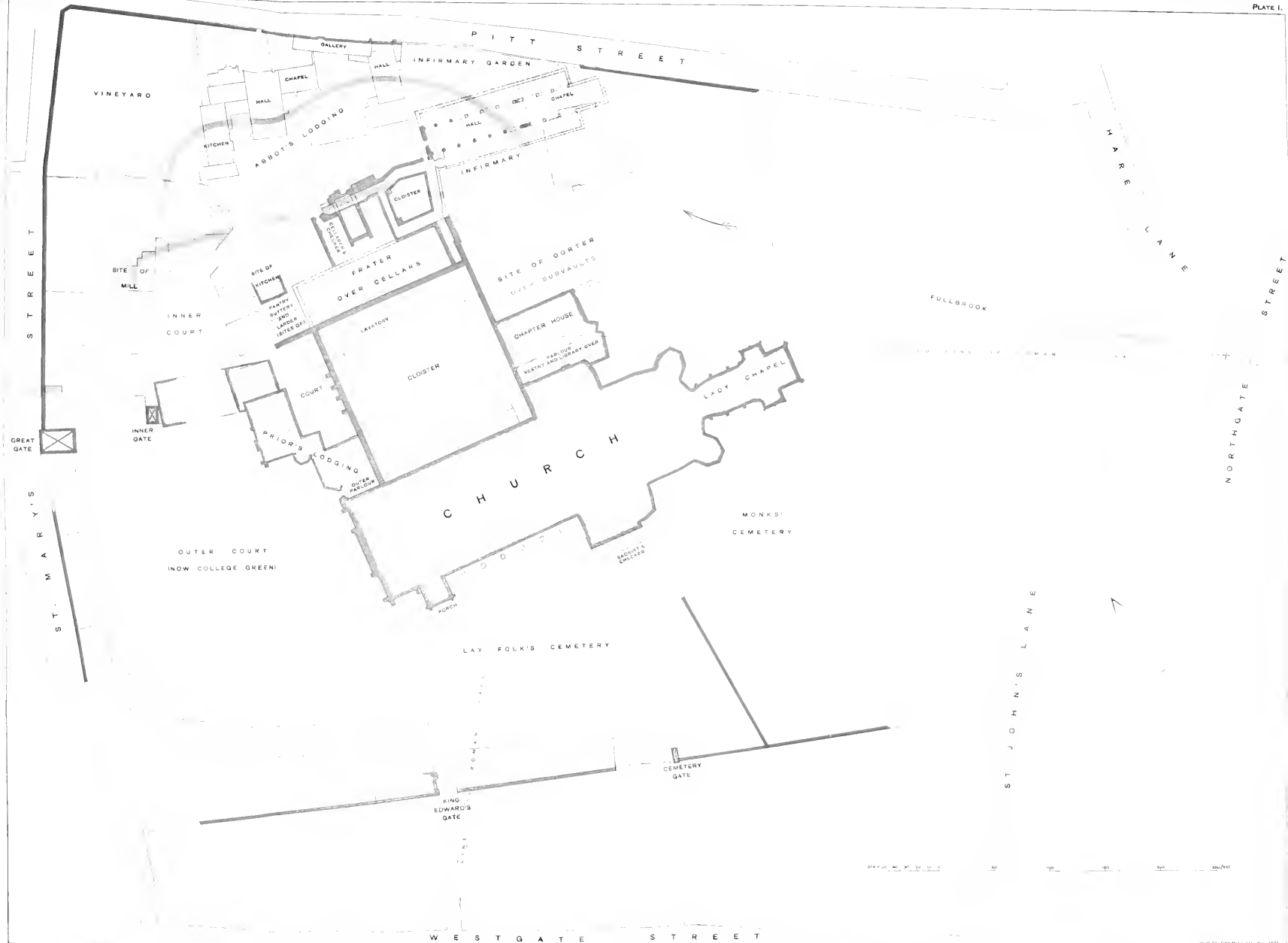
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W. H. St. John Hope, del., Nov. 1891



ST. PETER'S ABBEY, GLOUCESTER. BLOCK PLAN SHOWING RELATIVE SITES OF BUILDINGS.

How and when this distribution of the buildings first originated it is difficult to say, but a ninth century plan of the abbey of St. Gall shews the same general arrangement of the principal group of buildings as most of the large Benedictine houses.¹

The buildings of the abbey of Gloucester (see plan, plate I) are laid out very nearly according to the normal plan, and as considerable portions of the monastery still remain I cannot do better than indicate the general arrangement before proceeding to a more specific description of the buildings.

The abbey is situated in the north quarter of the city, in a nearly oblong area bounded on the north and west by streets, and on the east and south by broad rows of houses and gardens. The axis of this site lies north-west and south-east, but the church stands more nearly east and west, and we shall see presently that the variation of the two axes has at one point caused a curious deviation from the normal plan of the buildings. The shape of the site, it is quite clear, was largely influenced by the lines of the Roman town, and a little more than its south-eastern portion was once within the Roman town wall. The plan of the present abbey is however laid out without any reference to the Roman wall. (See plan, plate I.)

The chief building of the abbey is of course the church. The area south of this, between it and the city, was divided by a wall running south from the corner of the transept. The space west of this wall was the outer cemetery, appropriated to the laity. The space east of the wall was the inner cemetery, where the monks were buried.² A precisely similar arrangement existed at Canterbury.

On the north side of the nave, and occupying the centre of the site, is the cloister, round which all the buildings connected with the daily life of the monks are grouped and are accessible from it.

The space west of the church, and filling the whole of the south-west quarter of the site, was the outer court or

¹ See an admirable essay on the St. Gall plan by the late Professor Willis in *Archæological Journal*, v. 86-117. Also Ferdinand Keller, *Bauriss des Klosters St. Gallen von jahr 820*, 4to. Zurich, 1844.

² The first Lady Chapel, that finished in 1227-8, is called "*capella beate Marie in cimiterio.*" *Cott. MS. Dom. A. viii. f. 132b*; and Hart, i. 60.

curia. In it stood the hospitate buildings, consisting of the halls and chambers devoted to the exercise of hospitality and the entertainment of guests, and, near the great gate-house, the eleemosynary buildings for the relief of the poor.

The north side of the outer court was closed by a group of buildings with a gate-house in the centre, through which access was gained to the inner court, where stood the mill, the bakehouse, and other menial buildings.

The north side of the site was covered by the abbot's lodging and the great infirmary, both of which were closely connected by covered passages with the monastic buildings.

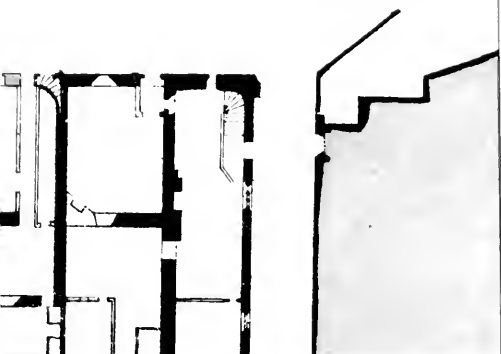
The entire site or precinct of the abbey was surrounded by a wall,¹ having the great gate-house in the middle of its west side, and a second large gate-house towards the city in the middle of the south side. A third and smaller gate a little to the east gave access to the outer or layfolk's cemetery.

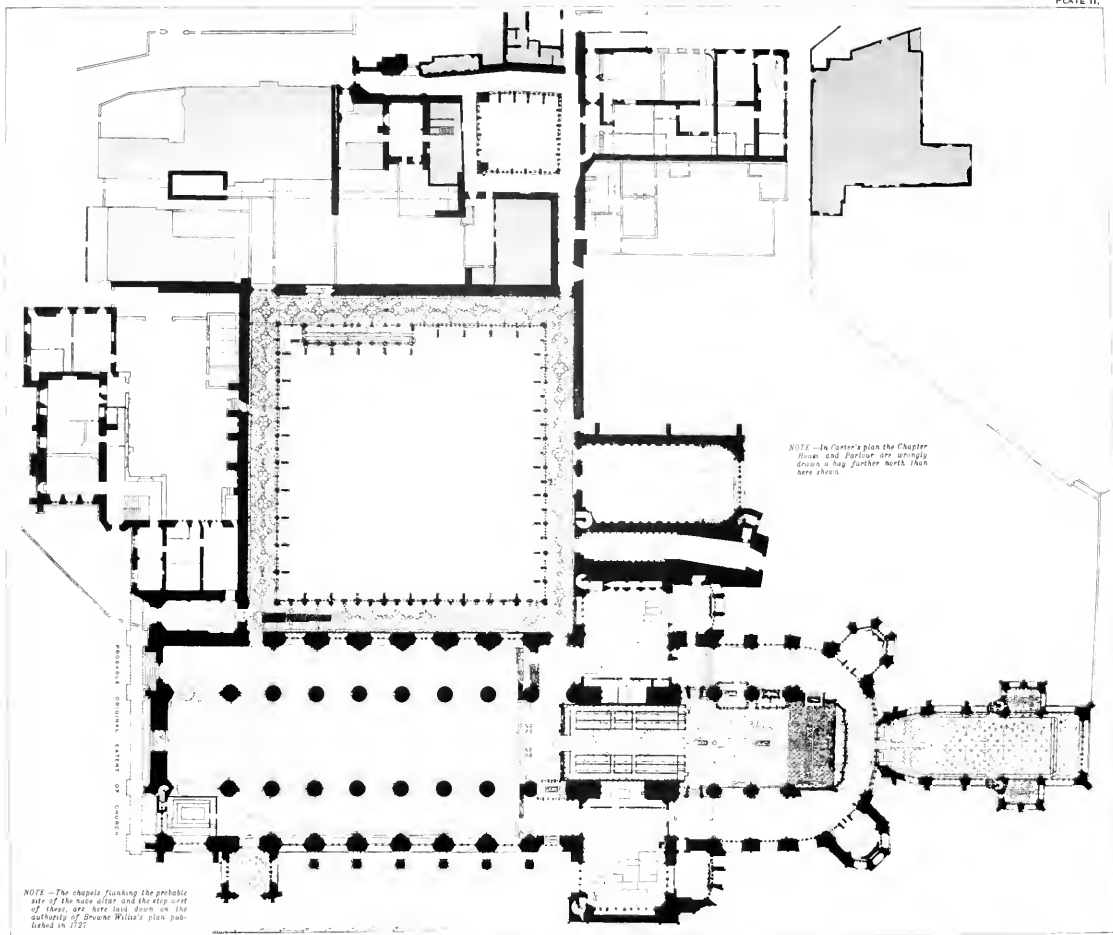
Of the church at Gloucester both the plan and architectural history are well known. But there are some points about its plan and arrangements on which a few words may be properly said. (See plan, plate II.)

It has often been remarked that with the exception of the eastern chapel the plan of the church has continued the same throughout its architectural history. The reason for this has not however been stated. It was not lack of money, for we are told that the offerings at King Edward's tomb amounted to so large a sum that the whole church could have been rebuilt. The real reason, I think, lies in the fact that the abbey of Gloucester possessed no great detached shrine, such as that of St. Thomas at Canterbury, or of St. Hugh at Lincoln, or of St. Chad at Lichfield, so there was no excuse for enlarging the church eastward to make room for the shrine and its altar, and for the pilgrims who visited it. It is true that large crowds flocked to King Edward's tomb, but that is on the north side of the presbytery, and there was ample passage for pilgrims thereto.

¹ This wall was built by abbot Peter (1104-1113), "*abbatiam muro lapideo insigni vallavit.*" *Cott. MS. Dom. A. viii.*

f. 128b; and Hart, i. 13. Considerable portions of it remain in places on the north, west, and south sides.





ST. PETER'S ABBEY, GLOUCESTER. JOHN CARTER'S PLAN OF THE CHURCH AND ADJOINING BUILDINGS (WITH CORRECTIONS AND ADDITIONS).

Rebased from the Plan published by the Society of Antiquaries in 1807.

Concerning the arrangement it must be borne in mind that until the suppression of the monastery the eastern half of the church was completely cut off from the nave and aisles by a series of screens. The part so cut off was the private chapel (so to speak) of the monks, and to it the lay folk were admitted only by favour. The nave formed as it were a separate church, and was furnished with a principal as well as minor altars, to all of which the laity had access. On the foundation of the existing college of secular canons in 1540 this arrangement was practically continued, and the quire is properly still, and was always meant to be, the private chapel of the Dean and Chapter for the daily service which they were established to maintain. In no sense was it intended to be treated as the chancel of a parish church, as some modern reformers would have it.

The existing arrangements of the quire and presbytery closely follow those of old. The high altar occupied the same site as does the present one, and had behind its reredos a narrow space containing cupboards for the principal jewels and, beneath the altar, two large recesses for the keeping in of relics. The two doors into this space were to allow the priest to pass completely round the altar when censing it at high mass. Such doors occur in the reredoses at Westminster, Durham, Winchester, and elsewhere.

The space behind the altar at Gloucester has been for some time, I know not for how long, called "the feretory." The Latin *feretrum*, of which "feretory" is an obvious English equivalent, from first meaning the bier upon which a coffin was carried, was afterwards applied to the stone base of a saint's shrine, and finally, when its original meaning was overlooked, to the place where the shrine stood. At Durham, for example, the platform of the great shrine is called in *Rites* "Saint Cuthbert's Feretorye."¹ At Gloucester, where there was no shrine, the term, if an old one, must have another meaning.

The space between the reredos and the quire was called the presbytery, and the two side doors into it

¹ *A Description or Breife Declaration of all the Ancient Monuments, Rites, and Customes belonging or being within the Monasticall Church of Dur-*

ham before the Suppression. Written in 1593. Surtees Society 15, 1842, p. 4, etc.

from the aisles were the *ostia presbiterii*. That on the north was the usual way by which the monks came into quire.

The quire proper is under the tower, a not unusual Benedictine arrangement. The original screens at the west end have unfortunately been destroyed, but from plans made by Browne Willis and Carter¹ while some remains of them existed the arrangement can be approximately recovered. I have advisedly used the plural word screens because they were two in number. The first consisted of two stone walls: the one at the west end of the quire, against which the stalls were returned; the other west of it between the first pair of pillars. There was a central door which was called the quire door. The western wall was broader than the other, and had in the thickness of its southern half an ascending stair to a loft or gallery above, which extended over the whole area between the two walls. This loft was called in Latin the *pulpitum*, and it must not, as it often has been, be confounded with the pulpit to preach from. It sometimes contained an altar, as apparently here at Gloucester, and on it stood a pair of organs. From it also on the principal feasts the epistle was read and the gospel solemnly sung at a great eagle desk. On either side the *pulpitum* door was probably an altar.

The double screen I have just described was built by abbot Wigmore, who is recorded to have been buried in 1337 "before the salutation of the Blessed Mary in the entry of the quire on the south side, which he himself constructed with the *pulpitum* in the same place," *ut nunc cernitur*, says the Chronicle,² and parts of it are worked up in the present screen. The north side of the quire entry, or perhaps the north quire door, was ornamented with images with tabernacles by abbot Horton.³

The second screen, all traces of which have long dis-

¹ See Browne Willis's *A Survey of the Cathedrals of York, Durham, etc.* (London, 1727), 692, and Carter's plans and drawings published by the Society of Antiquaries in 1807.

² "Anno Domini m^o.ccc.xxxviii^o. ii. Kalendas Marcii obiit dompnus Johannes de Wygmore abbas prelationis suo anno octavo et ante salutacionem

beate Marie in ingressu chori in parte australi sepelitur quam ipse construxit cum pulpito ibidem ut nunc cernitur." *Cott. MS. Dom. A. viii. f. 139b.*; and Hart, i. 47.

³ "Item construxit in ingressum chori in parte boreali ymagines cum tabernaculis ibidem." *Cott. MS. Dom. A. viii. f. 140b.*; and Hart, i. 50.

appeared, stood between the second pair of piers; that is, a bay west of the *pulpitum*. It was a lofty stone wall against which stood the altar of the Holy Cross, or Rood altar as it was more commonly called, and upon it was a gallery called the rood loft, from its containing the great Rood and its attendant images. The Rood usually stood on the parapet or front rail of the loft, but sometimes on a rood beam crossing the church at some height above the loft. Such an arrangement seems to have existed at Gloucester, for in the sixth course from the top a new stone has been inserted in both pillars exactly on the line where the ends of the rood beam would be fitted into or rested on corbels in the pillars. On either side of the rood altar the screen was pierced by a doorway for processions, and the altar itself was protected by a fence screen a little further west. Such a screen as this still exists in the nave of St. Albans, and I have found the bases of others in abbeys that I have excavated. We have also a detailed description in *Rites* of that at Durham, now utterly swept away, which I must presently quote. In continuation of the line of the west wall of the *pulpitum* were stone screens in both aisles. That in the north aisle completely blocked it, and contained in its thickness an ascending stair. In front was an altar enclosed by screens to form a chapel, and probably there was some way to the rood loft over this from the stair, for which otherwise I can see no use, unless indeed there was a loft north of and separate from the *pulpitum*. There are however no marks of this. The screen in the south aisle was pierced by a doorway, between which and the south rood door was an enclosed chapel like that on the north. All these arrangements had their parallels at Durham. The nave altar there is thus described in *Rites*:

In the body of the Church, betwixt two of the hiest pillors supportinge and holding up the west syde of the Lanterne, over against the Quere dore, ther was an Alter called JESUS ALTER, where Jhesus mess was song every fridaie thorowe out the whole yere. And of the backsyde of the saide Alter there was a faire high stone wall: at either end of the wall there was a dore . . . called the TWO ROODE DORES, for the Prosession to goe furth and comme in at. And betwixt those ij dores was Jhesus Alter placed, as is afforesaide. And at either ende of the Alter was closed up with fyne wainscott,

like unto a porch, adjoyninge to eyther roode dore, verie fynely vernished with fyne read vernishe; and in the wainscott, at the south end of the Alter, ther was iiij faire ALMERIES, for to locke the chalices and sylver ewetts, with two or thre sewts of VESTMENTS and other ornaments, belonginge to the said Alter for the holie daies and principall daies. And in the north end of the Alter, in the wainscott, there was a dore to come in to the said porch and a locke on yt, to be lockt both daie and nighte . . . Also the fore parte of the said porch, from the utmost corner of the porch to the other, there was a dore with two brode leues to open from syde to syde, all of fyne joined and through-carved worke. The height of yt was sumthinge above a mans brest; and in the highte of the said dore yt was all stricken full of iron piks, that no man shold clymme over. . . .

The description of the altar and reredos above it I need not quote.

Also above the hight of all, upon the wanle, did stande the most goodly and famous Roope that was in all this land, with the picture of Marie on the one syde and the picture of John on the other, with two splendent and glisteringe Archangels, one on the one syde of Mary and the other of the other syde of Johne. So, what for the fairness of the wall, the staitlynnes of the pictures, and the lyvelyhoode of the paynting, it was thowght to be one of the goodliest monuments in that church.¹

The north chapel at Gloucester had its parallel at Durham in the chantry chapel of the Nevilles, which filled up two whole bays of the south aisle, and, besides its altar and other furniture, had "therein a seate or pew, where the Prior was accustomed to set to here Jesus-messe."²

The chapel on the south side was represented at Durham by "a looft for the Mr and quiresters to sing Jesus mess every fridaie, conteyninge a paire of orgaines to play on, and a fair desk to lie there bookes on in time of dyvin service."³

The screen at Gloucester closing the south aisle corresponded to one at Durham blocking the north aisle, thus described in *Rites* :

In the entrance of the end of the said north allie into the said lanterne allie (*i.e.*, the north transept), from pillar to pillar, ther was a TRELLESDOURE, which did open and close with two leues, like unto a falden dor, and above the said dor it was likewaies trellesed, almoste to the hight of the valt above; and on the highte of the said trellesse was stricken full of iron piks, of a quarter of a yerd long, to th'entent that none should clyme over it; and was ever more lockt,

¹ *Rites*, 28, 29.

³ *Ibid.* 29.

² *Ibid.* 34.

and never opened, but of the Holie Daies, or of such daies as there was any Prosession.¹

At Durham the cloister is on the south side and at Gloucester on the north side of the nave, but *mutatis mutandis* the arrangements will be found to correspond. In each case it will be seen that the eastern of the two doorways between the nave and cloister was shut off from the nave by the screen and reredos of a chapel adjoining it on the west. The monks could therefore freely pass through the cloister door without being interrupted by strangers.

This eastern door was not only the ordinary entrance from the cloister, but through it passed the Sunday and other processions that included the circuit of the cloister and buildings opening out of it. The procession always returned into the church by the western cloister door, and after making a station before the great Rood, passed through the rood doors in single files and entered the quire through the *pulpitum* or quire door.

We must now pass to the examination of the monastic buildings round the cloister. (See plans, plates I and II.)

Beginning on the east, the building next to the church is a wide vaulted passage. It is chiefly of early Norman date, and was originally of the same length as the width of the transept against which it is built. It was entered from the cloister by a wide arch, and has a wall arcade on each side of 15 arches on the north, but only 11 on the south, the space between the transept pilaster-buttresses admitting no more than that number. The roof is a perfectly plain barrel vault, without ribs.

In the south-west corner is a hollowed bracket, or cresset stone as it was called, in which a wick floating in tallow was kept to light the passage when necessary.

It having become necessary in the fourteenth century to enlarge the vestry and library over the passage, its east end was taken down and the passage extended to double its former length. At the same time a vice or circular stair was built at the north-east angle to give access to the library. To prevent however the new stair encroaching too much on the apse of the chapter house, the addition to the passage was deflected a little to the south instead of being carried on in a straight line. The

¹ *Rites*, 32.

vault of the added part is a simple barrel like the early Norman work.

The use of this passage was twofold. First, it was the place where talking was allowed at such times as it was forbidden in the cloister. Hence its name of *locutorium*, or in English, the parlour. Secondly, it was the way for the monks to go to their cemetery, perhaps as they did at Durham, where "the Monnkes was accustomed every daie, aftere thei dynded, to goe thorowgh the Cloister and streight into the Scentorie garth, wher all the Monnks was buried, and thei did stand all bairheade, a certain longe space, praieng amongs the toubmes and throwghes for there brethren soules being buried there, and, when they hadd done there prayers, then did they returne to the Cloyster, and there did studie there bookes, until iij of the clocke that they went to evensong. This was there dalie exercise and studie, every day after they had dynded."¹

When the present cloister was built the original use of the parlour seems to have passed away, and in the new works the arch of entrance was blocked up and covered by the new panelling.

Since this also cut off all access from the cloister to the library stair, a new stair was built at the west end directly accessible from the cloister. For want of room this had to be intruded into the south-west corner of the chapter house.

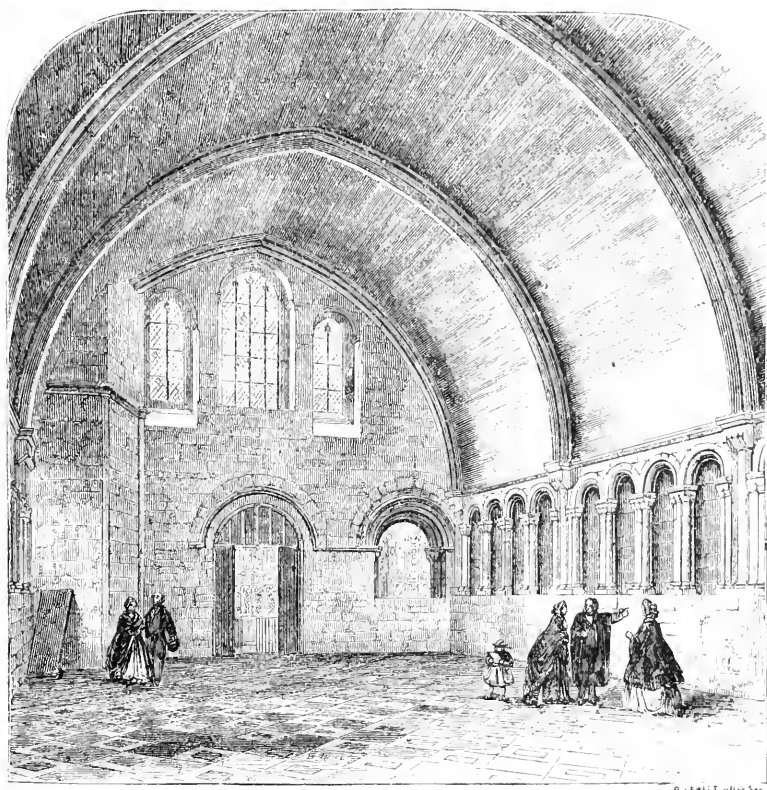
Above the old parlour are two rooms, one over the other. The lower being the vestry, the upper the library.

The vestry communicates only with the church, from which it is entered by a direct stair from the chapel east of the north transept. Before the suppression it was probably one large room where the many vestments and ornaments were kept, but it is now divided up by modern partitions into three separate vestries. All the old fittings have disappeared, but Carter's plan shews in it the two cope chests that now stand in the church.

The library is an interesting room of the 14th century, retaining much of its original open roof. The north side has eleven windows, each of two square-headed lights and

¹ *Rites*, 74.

perfectly plain, which lighted the bays or studies. The large end windows are late Perpendicular, each of seven lights with a transom. There are other alterations, such as the beautiful wooden corbels from which the roof springs, which are probably contemporary with the work of the cloister, when the western stair to the library was built and the room altered. None of the old fittings



THE CHAPTER HOUSE, GLOUCESTER, LOOKING WESTWARDS.
(From Murray's *Handbook to the Western Cathedrals*.)

now remain, but there can be no doubt that this was the library. It corresponds in position exactly with that at Durham, which is described in *Rites* as "standinge betwixt the Chapter house and the Te Deum wyndowe, being well replenished with ould written Docters and other histories and ecclesiasticall writers."¹

¹ *Rites*, 27.

The next building in order is the *capitulum* or chapter house. It is three bays long, and originally terminated, as at Durham, Reading, and Norwich, in a semi-circular apse, which was replaced by the present polygonal apse in the 15th century. The roof is a lofty barrel vault carried by three pointed arches. The vault of the apse is an ordinary lierne vault. Along the side walls, which are arcaded, may be traced the line of the stone bench on which the monks sat in chapter. The president's seat in the new apse seems to have stood on a low daïs.

The west end is arranged in the usual Benedictine fashion, with a central door flanked originally by two large unglazed window openings, with three large windows above. The lower part of this wall is clearly the early Norman work of Serlo,¹ and its stonework is reddened by the flames that destroyed the wooden cloister (or perhaps a temporary roof upon the chapter house) in the fire of 1102.²

The upper part of this end, and all the side walls and roof belong to the later Norman work, when the chapter house contained no wooden fittings to burn, and they shew no signs of fire. Either therefore the first building had a wooden roof, or it was incomplete and only temporarily covered in. The latter seems the more likely.

Only one of the windows flanking the doorway can now be seen; the other having been partly destroyed and covered by Perpendicular panelling when the new library stair was built in the south-west corner of the room.

In a normal Benedictine plan there extended from the chapter house, parallel with the cloister, a large two-storied building. The ground floor contained the common house, the treasury, and other offices; but the upper floor was the great dormitory, or dorter as it was more commonly called, in which the monks and novices slept.

¹ The first chapter house must have been built by or been nearly ready for use in 1085, for in that year died Walter, the founder of St. Peter's, Hereford, "cujus corpus Gloucestrie in capitulo honorifice sepelitur." *Cott.*

MS. Dom. A. viii. f. 148; and Hart, i. 73.

² Anno m^o.cij^o. Ecclesia sancti Petri Gloucestrie cum civitate igne cremata est." *Cott. MS. Dom. A. viii. f. 128; and Hart, i. 12.*

At Gloucester it is quite clear that owing to the contracted space on the north-east, and the near proximity of the infirmary buildings, the dormer did not occupy the normal position, but stood east and west beside, and extending beyond, the chapter house, so as to gain more space. A like arrangement existed at Winchester.

Of the history of this building we know very little. From the number of monks at the beginning of the twelfth century, when we may assume it was first built, it must have been of considerable size. In 1303, perhaps because it was injured in the fire that burned the cloister in 1300,¹ the Norman dormer was destroyed and a new one begun.² It took exactly ten years to build, and about All Saints' Day, 1313, after it had been blessed and sprinkled with holy water by the bishop of St. David's, the monks carried their beds into it.³

From the time it took in building the new work probably included the chambers, etc., forming the ground story.

Both the dormer and its basement are now destroyed, and their plan and extent are at present uncertain;⁴ but owing to its south wall having been partly that of the chapter house also one small fragment has been preserved which corroborates the historical account and helps us to fix the position of the dormer. This fragment, which may be seen on the north-east corner of the chapter house, is the jamb of one of the windows built between 1303 and 1313, and its date is clearly shewn by the little ball flowers round the capital of the shaft. It was also there before the Norman apse of the chapter house was removed,

¹ "De Incendio in abbazia tercio. Anno Domini m^occc^o. die Epiphanie circa horam ad sequenciam magne misse incepit incendium in abbathia Gloucestrie in una domo super merenium in magna curia abbathe. De ejus igne accensa fuerunt multa per abbatiam loca videlicet parvum campanile et magna camera. et claustrum." *Ibid.* f. 135b; and Hart, i. 35.

² "Anno Domini m^occcij^o. . . . dirutum est vetus dormitorium monachorum hujus loci circa festum Sancti Michaelis et incepta est structura novi dormitorii." *Ibid.* f. 137b; and Hart, i. 41.

³ "Anno Domini m^occcxiij^o. Novum dormitorium hujus domus circa festum sancti Michaelis perficitur et fratres monachi ex cellis egredientes cum lectis suis omnes se ad novum dormitorium transferunt circa festum omnium sanctorum prius per magistrum David Martyn Episcopum sancti Davidi benedicto et aqua benedicta asperso astantibus sibi clericis et monachis multis et maxime Willelmus (*sic*) de Fontayne id specialiter procurante." *Ibid.* f. 137b; and Hart, i. 41, 42.

⁴ I was unable by excavation to find underground any definite remains of the eastern limits of the dormer.

for the later apse, which is square externally, has the corner cut off so as not to block the window. A Decorated string course also remains along the chapter house wall, and on the west is a large blocked recess of Norman date against the cloister wall.

The dormer seems to have had only one door of communication from the cloister, in the south-west angle, where it still exists. As there is no other doorway north of it on this side of the cloister, this door probably opened into a sort of lobby from whence a flight of steps led to the dormer above and other doors opened into the chambers on the ground floor.

It is usual in most monasteries to find a direct communication from the dormer to the church, to enable the monks to go to matins at midnight without descending into the cloister. Such an arrangement however was not universal, and at Gloucester and Reading, both of them large abbeys, the monks had to come down into the cloister to get to the church.

Connected with the dormer, usually at its further end, was a considerable building, known as the rere-dormer, or in Latin *necessarium*. It was generally so built as to be traversed by the great drain of the abbey, into which a running stream was turned and kept it always clean. The site of this building at Gloucester was probably on the east or north-east of the dormer, where it might also serve the infirmary.

Concerning the internal arrangements of the dormer, it may be interesting to quote the description of the corresponding building at Durham, where the dormitory still exists as a great room about 200 feet long and nearly 50 feet wide, with the remains of the rere-dormer to the west of it :

Upon the west syde of the Cloyster there was a faire large house called the DORTER, where all the Monks and the Novices did lye, every Monneke having a litle chamber of wainscott, verie close, severall, by themselves, and ther wyndowes towards the Cloyster, every windowe servinge for one Chambre, by reasonne the particion betwixt every chamber was close wainscotted one from another, and in every of there wyndowes a deske to supporte there bookes for there studdie. In the weste syde of the said dormer was the like chambers, and in like sorte placed, with there wyndowes and desks towards the Fermery and the water, the chambers beinge all well boarded under foute.

The Novices had their chambers severall by himselfe in the south end of the said dorter adjoyning to the foresaid chambers, having eight chambers on each side. . . . In either end of the said Dorter was a four square stone, wherein was a dozen cressets wrought in either stone, being ever filled and supplied with the cooke as they needed, to give light to the Monks and Novices, when they rose to their mattins at midnight, and for their other necessarye uses. . . . And the mydest of the said Dorter was all paved with fyne tyled stone, from th'one end to th'other. Also the said Supprior's chamber was the first chambre in the Dorter, for seinge of good order kept.¹

The apartment under the dorter called the common house has often been mistakenly termed the "day room," a name invented, I believe, by the late Mr. Edmund Sharpe. Now, if any part of the monastery could properly be called the day room, it was the cloister, where the monks actually lived. The common house moreover was not a living room, but, as *Rites of Durham* tells us, it was "to this end, to have a fyre kept in yt all wynter, for the Monnekes to cume and warme them at, being allowed no fyre but that onely, except the Masters and Officers of the House, who had there severall fyres. . . . Also within this howse dyd the Master thereof keepe his *O Sapientia*, ones in the yeare, viz. betwixt Martinnes and Christinnes. a sollemne banquet that the Prior and Covent dyd use at that tyme of the yere onely, when ther banquet was of figs and reysinges, aile and caikes, and therof no superflwitie or excesse, but a scholasticall and moderat congratulacion amonges themselves."²

"Ther was belonging to the Common house" at Durham, says *Rites*, "a garding and a bowlinge allie, on the back side of the said house, * * * * * for the Novyces sume tymes to recreat themselves, when they had remedy of there master, he standing by to se ther good order."³ It is very probable that a similar arrangement existed at Gloucester, for we know that in 1218 there was a garden east of the frater, between the farmery and the dorter;⁴ and the blocked windows in the cloister wall, one of which is of early thirteenth century date,

¹ *Rites*, 72, 73.

² *Ibid.* 75.

³ *Ibid.* 75.

⁴ "Anno Domino m^occ^oxviii^o. quievit lis quam Willelmus prior et eanoniei sancti Oswaldi moverant (*sic*) contra ecclesiam sancti Petri Gloucestrie super ecclesia sancti Johannis ad portam

aquilonis et Capella sancte Brigide et terris infra murum abbacie a gardino recta linea descendendo per refectorium. lardarium. et pistrinum usque ad murum novum proximum sancto Oswaldo." *Cott. MS.* Dom. A. viii. f. 132; and Hart, i. 25.

shew that the area into which they looked, now the yard behind the King's School, was chiefly open ground.

In the north wall of the cloister, although it has been refaced with Perpendicular work, there are two early-English doorways, one at each end. The eastern doorway opens into a vaulted passage or entry that led to the infirmary, and at a later date to the abbot's lodging also. The western doorway is now filled up by a modern window. It still retains the upper pair of the iron hooks on which the doors were hung, and was the entrance into the great dining hall of the monks called *refectorium*, or in English the frater.

The word "frater" has nothing to do with the Latin for "brother," but is the English equivalent of the Latin *refectorium*, through the old French forms *refreitor* and *refretor* and by dropping the prefix as redundant to the fourteenth century English form "freytour" used by Chaucer and other writers. Since "frater" is the term always applied to the monastic dining hall by those who used it, and has even survived to our time at Carlisle and elsewhere, I prefer the shorter old-English term "frater" to the longer and more modern word "refectory."

The frater at Gloucester, which was begun in 1246¹ on the site of the Norman one destroyed to make room for it, was a great hall over 130 feet long and nearly 40 feet wide. As at Canterbury, Worcester and elsewhere it stood over an extensive range of cellars. It was therefore reached by a broad flight of steps, beginning in the cloister and passing up through the frater door. The steps did not open directly into the frater, but ended in a vestibule screened off from the rest of the hall and covered by a loft or gallery. Into this vestibule would also open the service doors from the kitchen and buttery. At the suppression of the abbey the "ffrayter wth thappurtennees" were considered "superfluous Buyl dynges," and the "leades Remayning" upon them, by estimation amounted to 45 fother. A note is however added in the valuation. "Now the house burned & most parte of the leade consumed so that there was founden in & upon

¹ "Anno Domini m^o.cc^o.xlvi^o dirutum est vetus Refectorium monachorum. et incepta est structura novi." *Ibid.* f. 133b; and Hart, i. 30.

therthe but xxvj floders and iiijd.”¹ The west end and nearly all the north side have been pulled down to the ground, but the south wall, being common to the cloister, remains up to the height of its window sills, which Mr. F. S. Waller tells me exist under the coping now surmounting the wall.

The east end² is also standing to the same height. It has its width nearly filled by the lower parts of five broad panels (of which the central was slightly wider than the others) separated originally by detached marble shafts, and in which higher up were probably as many windows. Much of the stonework of the east and south walls is reddened by the fire that destroyed the frater in 1540.

At Durham the frater seems to have been used by the monks on great festivals only, and at its east end, says *Rites*,

stoode a fair table with a decent skrene of wainscott over it, being kept all the rest of the yeare for the master of the Novicies and the Novicies to dyn and sup in. . . . having a convenyent place at the southe end of the hie table with in a faire glasse wyndowe, invyroned with iron, and certaine steppes of stone with iron rayles of th’ one side to goe up to it, and to support an iron deske there placed, upon which laie the Holie Bible, where one of the Novicies elected by the master was appointed to read a chapter of the Old or New Testament in Latten as aforesaid in tyme of dynner.³

There was also at the west end of the Frater-house, hard within the Frater-house door, another door, at which the old Monks or Convent went in, and so up a greese, with an iron rail to hold them by, into a Loft which was at the west end of the Frater-house, above the Cellar, where the said Convent and Monks dined and supp’d together. The Sub-Prior sate at the end of the table as chief; and at the greese-foot there was another door that went into the great Cellar or Buttery, where all the drink stood that did serve the Prior and the whole Convent of Monks, having their meat served them in at a dresser window from the Great Kitchen through the Frater-house, into the Loft, over the Cellar.⁴

Not improbably the same usages prevailed at Gloucester.

Since there is no cellarer’s building on the west side of the cloister, as at Canterbury, etc., the cellarer’s stores were kept at Gloucester in a great cellar (or series of cellars) under the frater. This cellar has been proved by

¹ P. R. O. Augmentation Office Book 494.

² This forms the west wall of the entry to the farmery, and is not in

the same line as the east wall of the cloister.

³ *Rites*, 69.

⁴ *Ibid.* 73, 74.

excavations made under my direction by the Gloucester Cathedral Society, by permission of the Dean and Chapter, to have been of Norman work. It was about 10 feet high, and divided down the middle into two alleys by a row of square Norman piers, upon which, and a series of corresponding pilasters along the side and end walls, rested a plain rubble vault. One of the responds on the south side retains its square chamfered abacus and a fragment of the springing of the vault.

From the positions of the responds uncovered it seems that both the cellar and the Norman frater above originally included the space now occupied by the entry to the little cloister, part of whose east wall is of Norman date. The new gable of the frater was however set further west, and so necessitated a re-construction of this end of the cellar.

The early-English north wall, on the little cloister side, has two blocked openings. The larger is an archway 12 feet wide and nearly as high originally, through which large barrels and other bulky stores could be brought in. The lesser opening, just to the east, was a narrow doorway which opened into a passage in the thickness of the wall with three steps down at the end. At the bottom an archway on the east opens into a passage about 17 feet long and over 6 feet wide, which led under the entry to the little cloister to a building on the other side now destroyed.

On the west of these openings are the remains of a large window.

Of the buttery, pantry, kitchen, and other offices that served the frater no definite remains exist, nor are their sites known. A dilapidated house with stone walls at the south-west angle may have formed part of the kitchen, which was usually a large and lofty building, surmounted by a pyramidal roof. Such were the convent kitchens at Ely and Durham, each about 35 feet square, and the splendid abbot's kitchen at Glastonbury is of the same area. The great convent kitchen at Canterbury was 47 feet square within. At Gloucester one of the buildings west of the frater was a larder, as we find from an agreement made in 1318 with St. Oswald's priory.¹

¹ See note *supra*.

Having now described the purely monastic buildings round the great cloister, for the abbot's lodging on the west side properly belongs to the hospitale buildings, with which it will be described, we will pass to the examination of the cloister itself.

The cloister was the place where the monks lived, and the various buildings connected with their daily life were grouped round it and accessible from it. Here at Gloucester it is 145 feet square, and is surrounded by covered alleys nearly 12 feet wide, enclosing a central open space, which was simply a grass plat. The outer walls are substantially of Norman date, but now overlaid and refaced by Perpendicular panelling. The first cloister was very different from what we now see, having only a wooden roof, resting in front on an open arcade carried by pairs of pillars. How long this remained we do not know, but in 1300 the cloister was destroyed by fire, together with the great *camera* or lodging and the little bell tower.¹ During abbot Horton's rule, 1351-77, a new cloister was begun, but only carried as far as the chapter house door, and for many years it remained unfinished. It was finally completed at great cost by abbot Froucester, who ruled from 1381 to 1412.²

The east alley, which is of earlier date than, and of different design from the other alleys, was used as a passage between the church and the farmery and later abbot's lodging, and out of it also opened the parlour, chapter house, and dorter door. The side to the garth is divided into ten bays, each containing a large window of eight lights crossed by a broad transom projecting externally like a shelf. Below this shelf the window openings were originally not glazed, but entirely open. Mr. F. S. Waller has suggested that the shelf, which also extends round the other sides of the cloister, formed a sort of awning or protection from the weather. In the third bay from the church the southern half is pierced with a door below the transom. On the cloister side of the southern half of the second bay, and of the northern half of the fourth bay there was in each case built out a

¹ See note *supra*.

² "Clastrum monasterii quod fuit inceptum tempore Thome Hortone abbatis et ad hostium capituli perduc-

tum et multis annis imperfectum ibidem relictum magnis expensis et sumptuosis honorifice construxit." *Cott. MS.* Dom. A. viii. f. 142b; and Hart, i. 30.

little cupboard or closet now destroyed. These may have been for keeping books in. This alley has no bench against the walls.

The south alley was shut off at the east end, and probably also at the west end, by a screen. It has ten windows towards the garth, each of six lights, but below the transom the lights are replaced by twenty little recesses or carrels, two to each window. Every carrel is lighted by a small two-light window and is surmounted within by a rich embattled cornice.

At Durham the corresponding alley is described in *Rites* as having

in every wyndowe iij PEWES or CARRELLS, where every one of the old Monks had his carrell, severall by himselfe, that, when they had dyned, they dyd resorte to that place of Cloister and there studyed upon there books, every one in his carrell, all the afternonne, unto evensong tyme. This was there exercise every daie. All there pewes or carrelis was all fynely wainscotted and verie close, all but the forepart which had carved wourke that gave light in at ther carrell doures of wainscott. And in every carrell was a deske to lye there bookes on. And the carrells was no greater then from one stanchell of the wyndowe to another. And over against the carrells against the church wall did stand certaine great almeries [or cupbords] of waynscott all full of BOOKES," etc. "so that every one dyd studye what Doctor pleased them best, having the Librarie at all tymes to goe studie in besydes there carrells.¹

The Gloucester carrells shew no signs of fittings, nor have they been enclosed by wainscot. There are also no marks on the opposite wall of bookcases having stood there. It is however possible, from certain differences in it, that the easternmost carrell was fitted up as a book closet.

The west alley closely resembles the east alley, and like it was a mere passage, but it has a stone bench along the wall. At its north end is the frater door, already described, and at the south end the procession door into the church. In the west wall are two doorways. One, about the middle of its length, opens into the court of the abbot's old house. The other, at the southern end, opens into a vaulted passage of Norman date under part of the abbot's house, which was the main entrance into the cloister from the outer court.

This entrance was always carefully guarded to prevent intrusion by strangers or unauthorized persons.

¹ *Rites*, 70, 71.

The passage itself, which will more properly be described with the abbot's house, served as the outer parlour, where the monks talked with strangers and visitors ; it



THE SOUTH ALLEY OF THE CLOISTER AT GLOUCESTER, SHEWING
THE MONKS' CARRELS.

(From Murray's *Handbook to the Western Cathedrals*.)

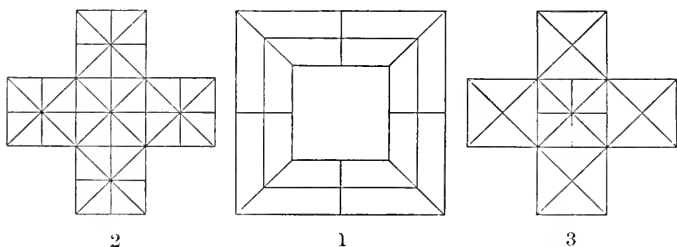
was also, as at Durham, “a place for marchannts to utter ther waires.”¹

¹ *Rites*, 14.

The west alley wall towards the garth has ten six-light windows, with unglazed openings below the transom, now all bricked up. Below the southernmost window, and in the third bay from the north are doors into the garth.

The north alley was closed at both ends by screens, and must therefore have had some special use. From analogy with the arrangements at Durham there can be little doubt that this alley was partly appropriated to the novices. At Durham the north end of the west alley, near the Treasury, was so used, and "over against the said Treasury door was a fair stall of wainscott where the Novices were taught. And the master of the Novices had a pretty seat of wainscott . . . over against the stall where the Novices sate. And there he taught the said Novices both forenoon and after noon. No strangers or other persons were suffered to molest or trouble the said Novices or Monks in their carrels while they were at their books within the Cloister. For to that purpose there was a Porter appointed to keep the Cloister door."¹

We have moreover curious evidence that the north alley at Gloucester was appropriated to the novices in the traces of the games they played at in their idle moods. On the stone bench against the wall are scratched a number of diagrams of the form here represented:



DIAGRAMS OF GAMES IN THE CLOISTER AT GLOUCESTER.

The first, of which there are several, is for playing the game called "Nine Men's Morris," from each player having nine pieces or men. The other two are for playing varieties of the game of "Fox and Geese." Such traces of games may generally be found on the bench tables of cloisters, where they have not been "restored," and excellent examples remain at Canterbury, Westminster,

¹ *Rites*, 71, 72.

Salisbury, and elsewhere, though they have not received the attention they deserve.¹

At Gloucester they are almost exclusively confined to the novices' alley, the only others now to be seen in the cloister being an unfinished Nine Men's Morris board in the south alley and one or two crossed squares in the west alley.

The north alley wall towards the garth is divided into ten bays. Of these, the five eastern bays have the usual window of six lights in the upper half, but the lower half contained six small openings, all now bricked up save two or three that have been re-opened. Unfortunately all have lost their sills, and their sides have also been cut away, perhaps, as Mr. F. S. Waller suggests, to fit a certain sized brick; it is however clear that they were glazed. In the fifth bay is a small and narrow blocked doorway into the garth. The next four bays are occupied by the very beautiful lavatory, one of the most perfect of its date that has been preserved. It projects eight feet into the garth and is entered from the cloister alley by eight tall arches with glazed traceried openings above. Internally it is 47 feet long and $6\frac{1}{2}$ feet wide, and is lighted by eight two-light windows towards the garth, and by a similar window at each end. One light of the east window has a small square opening below, perhaps for the admission of the supply pipes, for which there seems to be no other entrance either in the fan vault or the side walls.

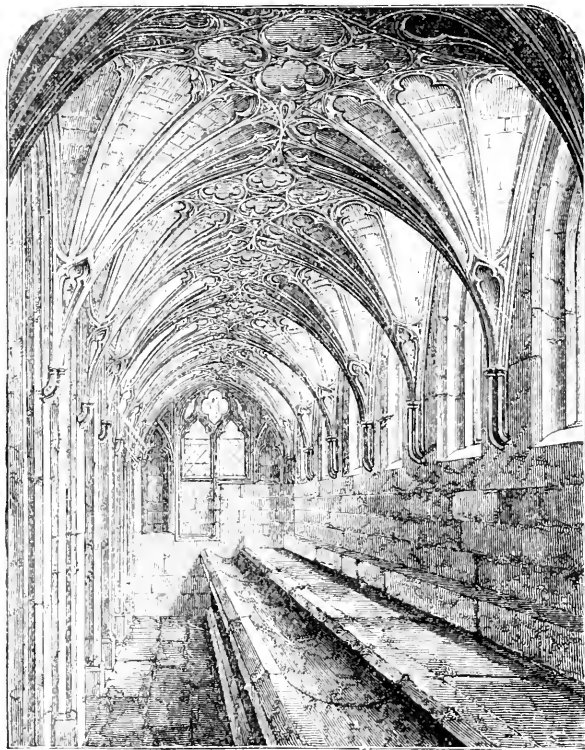
Half the width of the lavatory is taken up by a broad flat ledge or platform against the wall, on which stood beneath the windows a lead cistern or laver with a row of taps, and in front a shallow trough originally lined with lead at which the monks washed their hands and faces. From this the waste water ran away into a recently discovered tank in the garth. This will be noticed when describing the water supply.

In the eastern half of the bay west of the lavatory is a very curious arrangement. It consists of a large opening in the lower part of the window, occupying the space of two lights, with a square chase in the head carried up

¹ An interesting paper *On the indoor games of School boys in the Middle Ages*, by Mr. J. T. Micklethwaite, F.S.A., is printed in the *Archæological*

Journal, xlix. 319-328. The Gloucester examples are therein described and figured from my notes.

vertically on the outside. It had a transom at half its height, now broken away, as is also the sill. My friend, Mr. J. W. Clark, F.S.A., has suggested to me that the chase (which was probably lined with wood) was for a rope, and as a bell in the vicinity of the frater, to call the brethren to meals, was a not uncommon feature, the bell may very likely have been here placed at Gloucester.



VIEW OF THE CLOISTER LAVATORY, GLOUCESTER.
(From Murray's *Handbook to the Western Cathedrals*.)

In the north wall of the cloister opposite the western bay of the lavatory is a groined recess or almary where the towels were hung. At Durham, where there was an almary on either side the frater door, "all the forepart of the Almeries was thorough carved worke [for to geve ayre to the towels] and iij dors in the forpart of either almerie, and a locke on every doure, and every Monneke had a key for the said almeries, wherin did hinge in

every almeric cleane towels for the Monnecks to drie there hands on, when they washed and went to dynmer.”¹

The Gloucester towel recess was also closed by doors, the hooks and other traces of which still remain. Above the doors is “through carved work” or open tracery like that formerly at Durham. The towels were hung in two wooden cupboards at the back.

At the north end of the east alley of the cloister, and almost concealed by the later panelling, is an early-English doorway opening into a vaulted passage or entry, chiefly of the thirteenth century. This entry passes between the east gable of the frater and what I have suggested may have been the common-house garden, and leads straight into the infirmary cloister. The passage is covered by a stone vault of four bays supported by heavy moulded ribs springing from corbels. The south half of the passage is 6 feet 10 inches wide, but the northern half of the east wall is set back so as to increase the width to 7½ feet. This passage was lighted in the first bay by a single light with trefoiled head, with very wide internal splay. In the wider end were two other openings now blocked. That to the north had a transom two-thirds of the height up, above which the rear-arch is moulded, while below it is plain. The other is not carried above the transom level and the sill has been cut down and the opening made into a doorway into a house outside; in which state it remained until within the last forty years. That some thirteenth century building stood here seems evident, and the upper half of the north opening was clearly a window above the roof to light that end of the entry.

The north end of the entry opens directly into the east alley of the infirmary or “farmery” cloister, which is built against the north side of the east end of the frater.

It is an irregularly shaped area of about 54 feet square, and consists of a central garth surrounded by covered alleys. The garth wall is of good Perpendicular work with five traceried openings on each side.

The south side is still covered by a lean-to roof, but the west alley forms part of a fifteenth century house which is built over and to the west of it.

The north alley and most of the east alley, which are

¹ *Rites*, 67.

now open to the sky, were not long ago also covered by part of a large house on the east. The room or rooms over them, on a plan made in 1831, kindly lent me by Mr. Waller, are called Babylon. Probably this is an old name, and we have analogous cases in Jerusalem Chamber and Jericho Parlour at Westminster Abbey, and the two upper chambers in the pentise gatehouse at Canterbury called Heaven and Paradise. In the thickness of the north wall is a stair now blocked, which led to Babylon, and seems to show it was an old building, but Babylon itself has now disappeared and with it all the old work on the east side of the cloister. Whether as at Canterbury there was an infirmary cloister here in Norman times we cannot now tell, but the present one, excepting of course the garth wall, was certainly built (or rebuilt) with the frater in the thirteenth century, and there may still be seen in the south alley, against the frater wall, part of a moulded half-arch that crossed it at its east end to carry the thrust of the frater gable, and some of the hooked corbels that supported the lean-to roof. But the early-English arrangement differed considerably from that now existing, since there must have been some means of bringing carts through it to the archway into the cellar under the frater.

Part of the court of the infirmary cloister at Canterbury was in Norman times the *herbarium* or herb garden, and it is quite possible that the small garth at Gloucester was used for the same purpose.

On the north-east of the infirmary cloister stood the infirmary itself. It consisted of a great hall standing east and west, built like the nave of a church, with north and south aisles, pier arches, and clerestory windows above, with a large chapel attached to the east end of the hall, as at Canterbury, Ely, Peterborough, and elsewhere. There was also a kitchen and other offices, and sometimes other chambers were added like the "table hall" at Canterbury and Ely.

It was usual at the suppression to pull down most of the "farmery" as being "deemed superfluous," but the minor parts of it, being purely domestic in character, were often converted into dwelling houses for the prebendaries and other members of such new foundations as

Gloucester, and so considerable portions have been preserved. Here the chapel was destroyed, and the great hall unroofed and partly demolished, but its west end and six arches of the arcade escaped, the latter probably because, as at Canterbury, the south aisle had been previously cut up into sets of chambers. All these remains are of admirable early thirteenth century work, and it is much to be regretted that in clearing away the old houses in 1860, it should have been found necessary to also remove a curious vaulted lobby and other remains on the east side of the little cloister. The main entrance was originally in the west end of the hall, where part of the doorway still remains, and was probably covered by a pentise or porch with a door (still remaining) from the infirmary cloister, so that there was a continuous covered way from the farmery to the church. A more important entrance seems however to have been made later at the west end of the south aisle.

Owing to the cramped space in this part of the abbey precinct, all the subordinate buildings of the farmery were placed on the south side of the great hall. They are shewn in Carter's plan, incorporated with later dwellings, but have unfortunately all been removed, and only one house containing old work now remains. This however I have not yet had an opportunity of examining, but in one of its outhouses is to be seen a corner of the farmery chapel. Such space as there was on the north, and that to the west was the infirmary garden.

The popular notion of a monastic infirmary is that it was simply the hospital for sick monks. But this was only one of its uses. As its very name tells us it was also the abode of the infirm brethren, and the *sempectæ* or monks who had been professed fifty years, and were then no longer bound to adhere strictly to the Rule, also lived there. Besides these, there were also admitted any of the monks who were temporarily released from the observance of the Rule, such as the *minuti*, that is, those who had been let blood. The beds of the inmates were originally arranged in the aisles of the hall, but in the fourteenth century and onwards the aisles were generally cut up into a number of little rooms.

Among the buildings of the farmery was probably the

hall in which the monks were allowed to eat flesh and drink freely by special leave of their superiors, and this being an indulgence (*misericordia*), the hall was called the "misericord." Though I cannot fix its site, such a hall certainly existed at Gloucester, as may be seen from one of the injunctions issued to the monastery by Robert of Winchelsea, archbishop of Canterbury, in 1301:

Injungimus etiam vobis districtè quod quandocunque fratres monachi pro recreatione in infirmaria comederint, due partes ad minus comedant in refectorio in conventu abbatiæ: et cæteris officialibus quibus incumbit cura hospitum et infirmorum continua cum tertia parte existente in recreatione in infirmaria minime computatis cum laborantibus et debilibus abbati et priori liceat dispensare.¹

On the west side of the little cloister, and partly overriding it, is a medieval house of several dates, from the thirteenth century to the suppression and later. Owing however to modern partitions and fittings and repeated alterations it is somewhat difficult to trace its architectural history. The oldest part of it consists of a vaulted undercroft of early-English work extending north and south beneath the western part of the house. It consists of three bays, of which two now form the kitchen of the house, and the third or northernmost is walled off to form a passage outside. More work of the same period adjoins this on the west, including a good doorway with moulded head. This doorway was clearly, as now, an external one. The undercroft stops short about 12 feet from the frater wall (or wide enough to leave a cart way) and there is nothing to shew that it extended further east. Looking at its position so near the great cellar, the kitchen, and other offices, it is very probable that the original upper floor was the cellarer's checker, or counting-house, and the undercroft a place for stores. Such an arrangement had its parallel at Durham, where the cellarer's checker adjoined one "end of the Great Kitchinge, having a longe greece goynge up to yt over the Fawlden yeatts."² Such a greece or stair may well have been approached by the early-English external doorway here. The cellarer's office at Durham "was to see what expences was in the Kitchinge, what beffes and muttones was spente in a weeke, and all the spyces and other necessities that

¹ Hart, i. lxxxvii.

² *Rites*, 83.

was spente in the Kitchinge, both for the Prior's table and for the hole Covent, and for all strangers that came. Yt was his office to se all things orderlye served, and in dewe tyme. The chambre where he dyd lye was in the Dorter."¹

We must now pass to the examination of the hospitate buildings, or those devoted to the reception of guests. These were generally arranged in three groups. The abbot's group, where the king, distinguished ecclesiastics, or nobility were entertained, at first stood on the west side of the cloister. But in the fourteenth century a new lodging for the abbot was built on the north side of the precinct, and his first lodging handed over to the prior. The second group was in charge of the cellarer, and stood somewhere in the great court; in it were lodged merchants, franklins, and other middle class folk. The third group, where the lower orders, pilgrims and paupers, were housed, stood in the immediate neighbourhood of the great gatehouse. This was in fact the casual ward, which on account of its costing least, is the only form of public hospitality that has survived down to our own time, for it must not be forgotten that the passing of the Poor Law was a direct consequence of the suppression of the monasteries.

The old abbot's lodging, afterwards the prior's house, and now the Deanery, stands on the west side of the cloister. It consists of two main blocks, built on two sides of a court; the one to the south in the angle formed by the cloister and the church, the other to the west with the court between it and the cloister.

The southern block, which contained the private apartments of the abbot, consists of three large square Norman chambers, one above the other, with their original windows enriched within and without with zigzag mouldings. Each chamber has also in the north-east corner an inserted or altered doorway into a garderobe tower shewn in Carter's plan but now destroyed; and the two lowest chambers have their southern corners crossed by stone arches, moulded or covered with zigzag ornament. All these chambers are sub-divided by partitions into smaller rooms.

¹ *Rites*, 83.

The ground story is entered from a vaulted lobby or antechamber, now modernized and converted into a porch. The first floor has a similar antechamber, as had originally also the second floor, but this has been altered. These antechambers are all of early thirteenth century date, with a good deal of excellent work remaining about the windows.

Between the church and the rooms just described is a building of two stories. The ground story consists of a vaulted passage already described as the outer parlour. It is on a lower level than the cloister, which is reached from it by a flight of steps. Over it is a lofty room, also vaulted, which was the abbot's chapel. It is now entered by an awkward skew passage from the first floor antechamber.

Both the chapel and outer parlour were once 9 feet longer, but were shortened, and their west ends rebuilt with the old masonry, at the same time that, I have reason to believe, the west front of the church was rebuilt and also curtailed of a bay in the fifteenth century. The first floor of all this part of the house contained the abbot's private apartments, namely, his dining room, bedroom, solar and chapel. The second floor was devoted to his own special guests, while the ground story contained a reception room and probably accommodation for one or more servants.

At the north-west corner of this southern block is a semi-octagonal turret. Until this was altered a few years ago it contained the front entrance into the deanery, and within it a flight of stairs led to a series of landings communicating with the antechambers on the first and second floors, as well as the rooms on the north. Both the turret and the landings replace a much earlier entrance tower, nearly square in form, and of the same date as the antechambers. Many traces of this remain, and shew that it was a handsome and important structure.

The western block of buildings, which is connected with the southern block by the turret and landings, has been so altered in the fifteenth century, and further modernized and enlarged of late years, that it is very difficult to make out the original arrangement. The

southern half is two stories high, with a large hall on the upper floor, and the servants' department below. The hall is now divided into two rooms lined with good Jacobean panelling, and its fifteenth century roof under-drawn by plaster ceilings.

At the north end of the hall is another two-story building. The lower floor is of stone, and now contains various domestic offices. But originally it formed part of a building of considerable architectural importance, as may be seen from the jamb of an elaborate early-English window at the north-west corner. From its position, this early-English building, which seems to have extended westwards as far as the inner gate, was most likely the abbot's hall, and here doubtless took place the famous historical dialogue between Edward II. and abbot Thoky.¹ Some time before the end of the fifteenth century this hall was cut down and an upper story of wood built upon it, of which the east end still remains. At one time it evidently extended further west. Internally it has been gutted and now contains nothing of interest to shew its use.

The court of the abbot's house was probably enclosed by covered alleys on the west and north sides to enable the abbot to pass into the cloister under cover. In recent alterations to the deanery a block of additional rooms has been built on the west side of the court against the hall.

During the first half of the fourteenth century the abbot removed from the old building on the west side of the cloister to a new lodging on the north side of the monastery, and the old abbot's house became the abode of the prior.

The history of the new lodging is as follows :

Between 1316 and 1329, while John Wygmore was prior, "he built the new *camera* of the abbot beside the infirmary garden."² Abbot Thomas Horton (1351-77) built "the abbot's chapel beside the infirmary garden."³

These extracts from the Chronicle of the abbey, when compared with the plan of the group of buildings they

¹ See *Hart*, i. 44.

² "Dum prior ejusdem monasterii extiterat cameram abbatis juxta gardinum infirmarie construxit." *Cott. MS.* Dom. A. viii, f. 139; and *Hart*, i. 55.

³ "In edificiis tam extra quam infra multum ampliavit ut capellam abbatis juxta ortum infirmarie." *Ibid.* f. 140b; and *Hart*, i. 48.

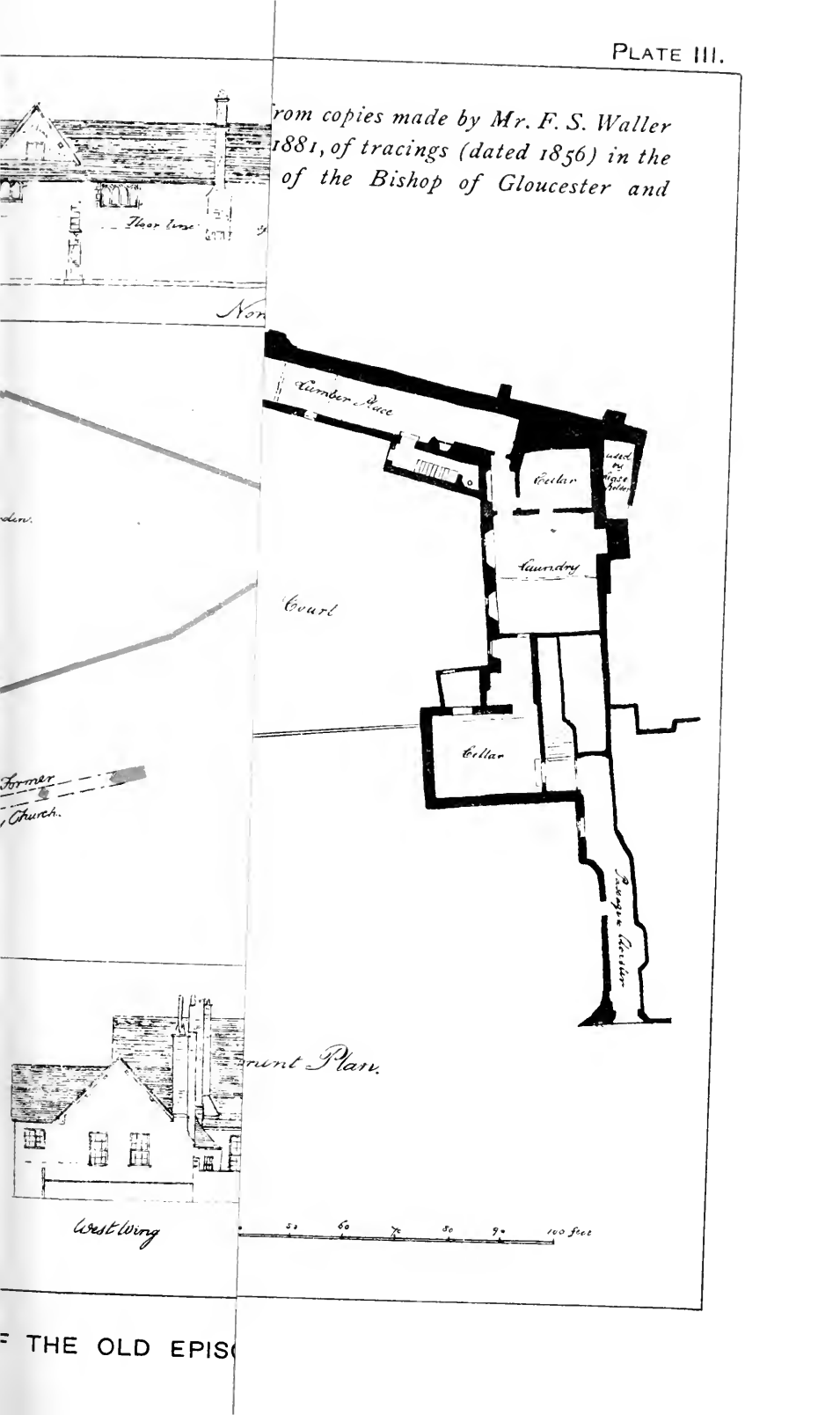
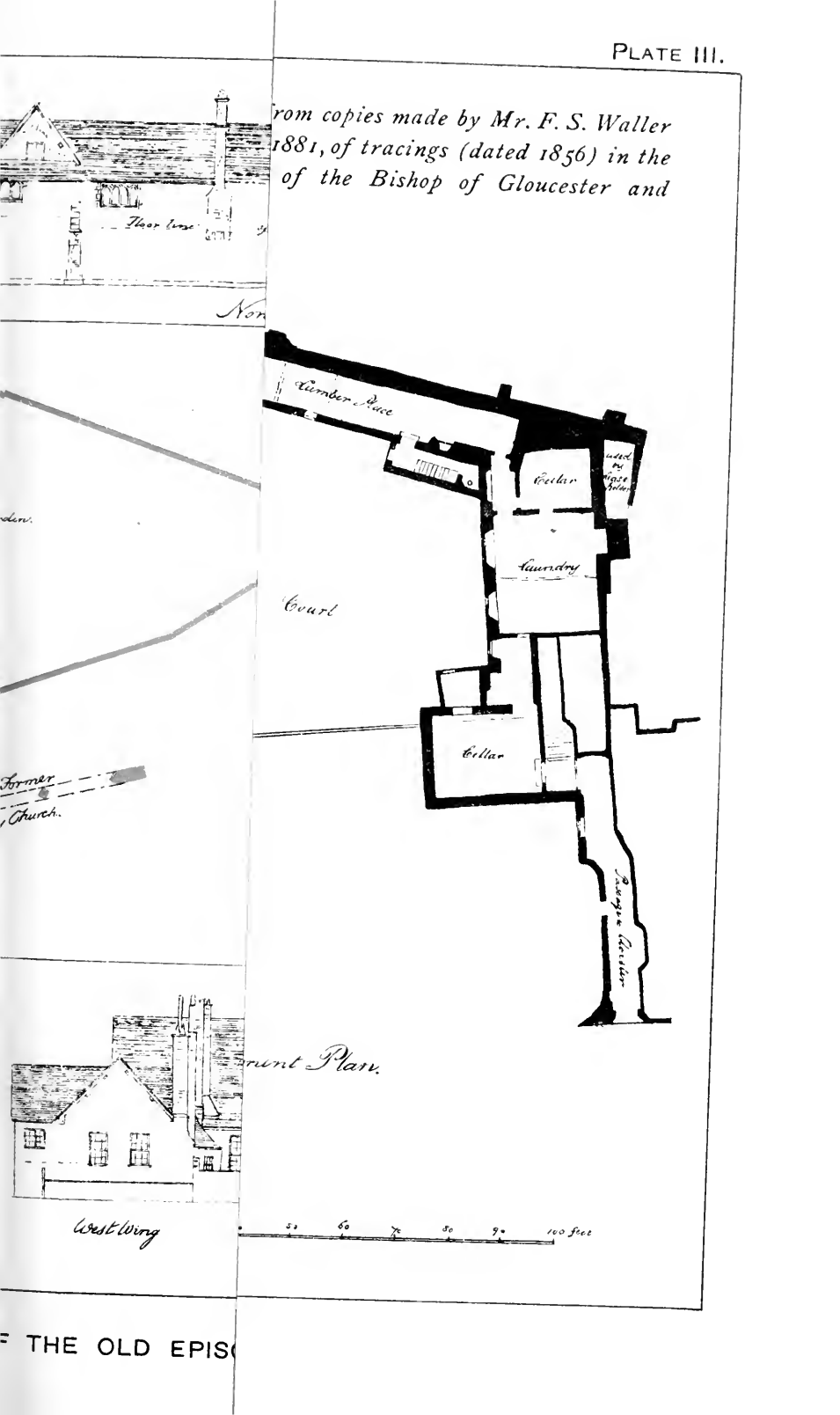
refer to, which until 1862 formed the bishop's palace, are easy of explanation. First as to the meaning of the word *camera*. This in medieval language is not always restricted to a single room, but may mean a group of chambers, or even a hall with the chambers and offices annexed to it. The letters patent of Henry VIII. founding the bishopric of Gloucester in 1541, among other things, grant to the bishop for his residence all the premises known as the abbot's lodging, of which a detailed description is given in the charter.¹ Until the building of the present palace, this ancient dwelling of the abbot and his successors the bishops of Gloucester remained substantially intact, and through Mr. Waller's kindness I am able to give plans and drawings of it made before its destruction. (See plate III.) From a careful comparison of the plans and elevations with Henry VIII's charter we can make out its original uses fairly accurately.

Broadly speaking the house consisted of the great hall with the abbot's *camera* on the east, and the servants' department and lodgings for guests on the west. From the abbot's apartments, where he also entertained special guests, a gallery led eastward to another *camera* close to the infirmary, containing a hall, pantry, kitchen, chapel, and bedrooms, which were the private apartments of the abbot himself. All these buildings had cellars and offices beneath them. On the east of the abbot's lodging lay the infirmary garden, on the west the inner court, and on the south the abbot's garden. The north side was bounded by a street. The sequence of the buildings I take to be as follows:

The eastern *camera* was that built by Wygmore, while prior, beside the farmery garden. The great hall was probably also Wygmore's work, to which were added, by abbot Horton, the abbot's apartments on the east and the little hall for the servants on the west.

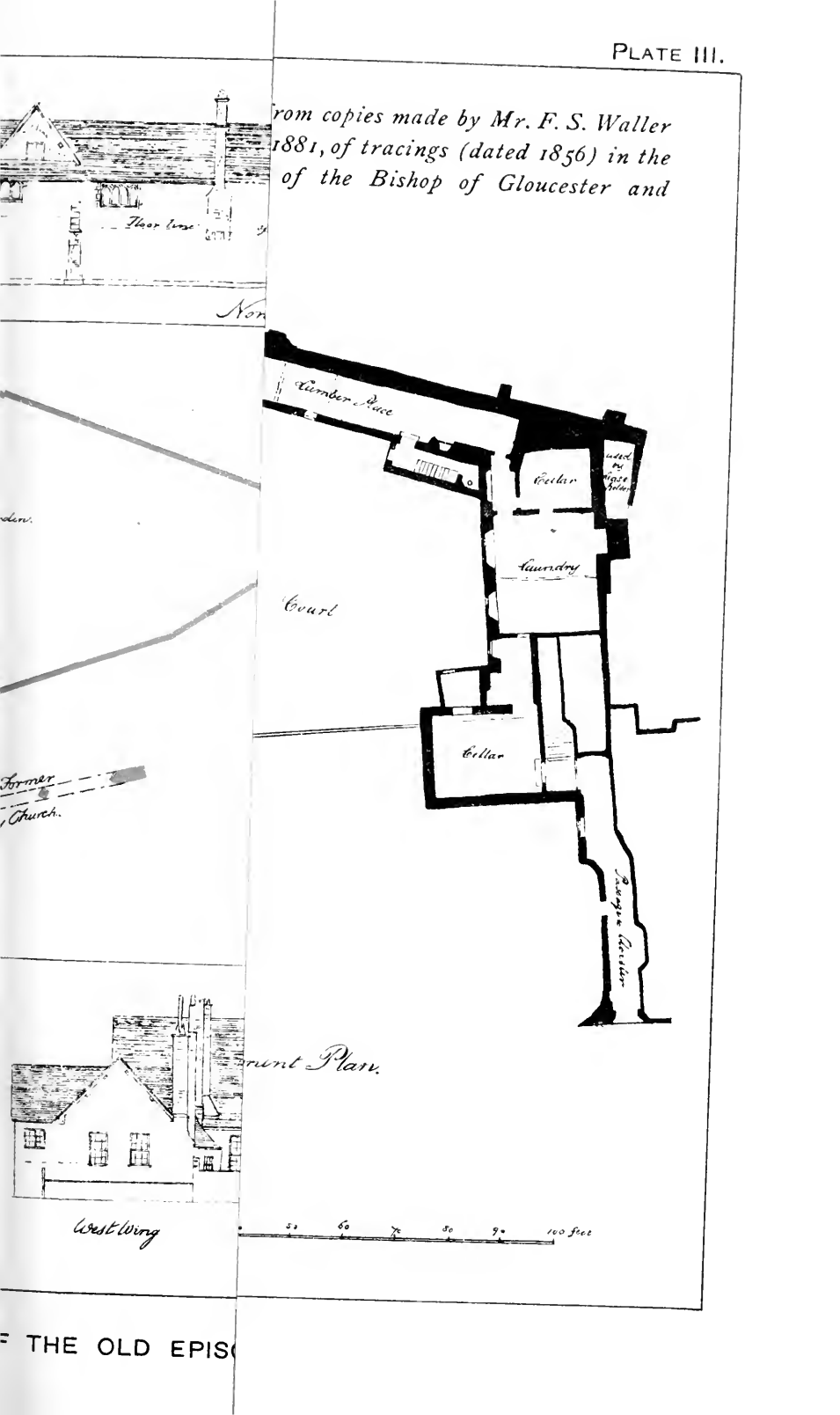
The use to which all this large establishment was put is well described in *Rites of Durham*, where the Prior whose hospitallie was soch as that there neaded no geist haule, but that they weare desyrouse to abound in all lyberall and fre almess geving, did keppe a moste honorable house and very noble intertaynement, being attended upon both with gentlemen and yeomen, of

¹ See Appendix.

[illegible]

From copies made by Mr. F. S. Waller
1881, of tracings (dated 1856) in the
of the Bishop of Gloucester and

The plan shows a complex of buildings. At the top left is a building labeled 'Lumber Room'. Below it is a 'Court'. To the right of the court is a 'Cellar' and a 'Laundry'. Further right is a 'Bishop's Residence'. At the bottom left is a 'Former Church' and a 'West Wing'. A scale bar at the bottom indicates distances from 0 to 100 feet.



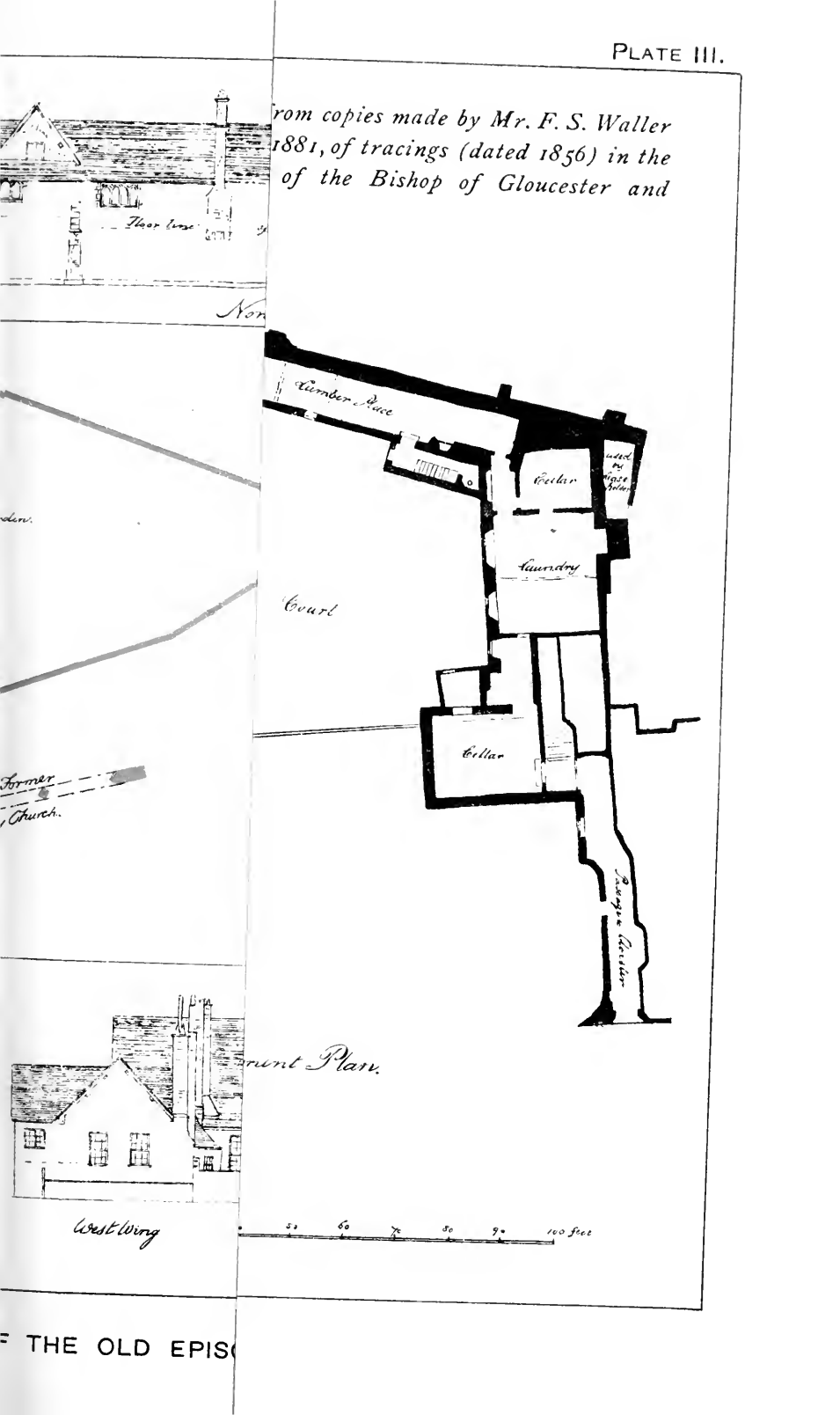
From copies made by Mr. F. S. Waller
1881, of tracings (dated 1856) in the
of the Bishop of Gloucester and

The plan shows a complex of buildings surrounding a central 'Court'. To the north of the court is a long building labeled 'Dormitory'. To the east of the court is a building labeled 'Laundry'. To the south of the court is a building labeled 'Cellar'. To the west of the court is a building labeled 'Garden'. A 'Former Church' is shown to the southwest. The plan is oriented with North at the top. A scale bar at the bottom indicates distances from 0 to 100 feet.

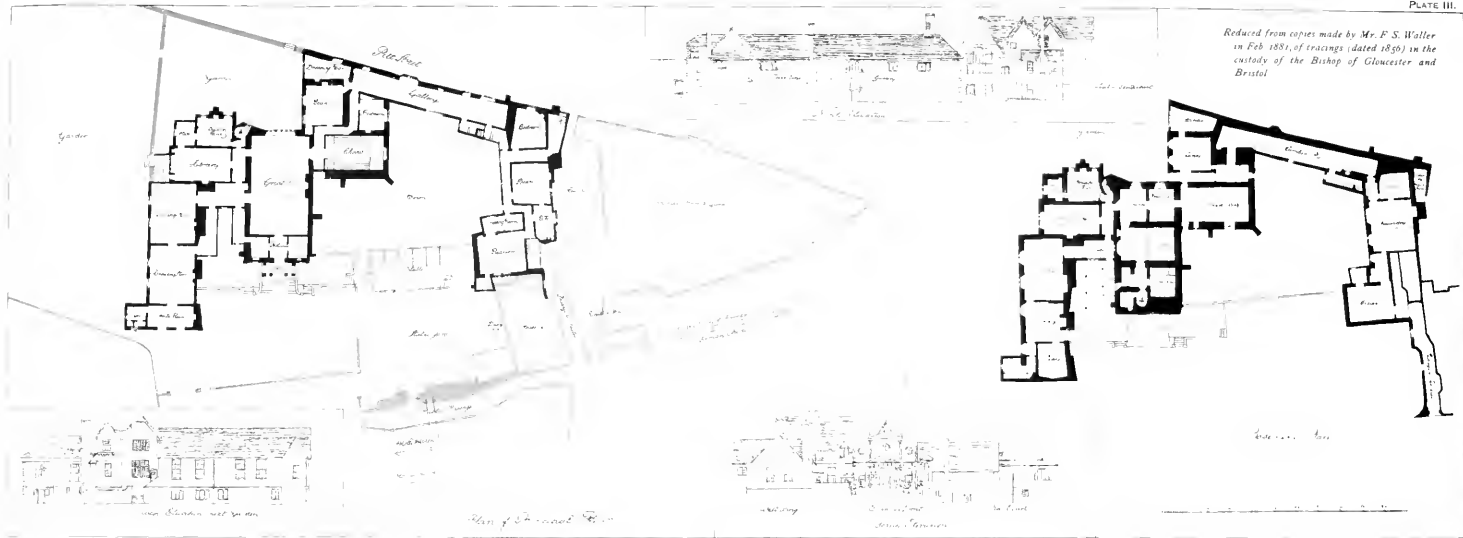
North

Former Church

Scale: 0 20 40 60 80 100 feet



Reduced from copies made by Mr. F. S. Waller
in Feb 1881, of tracings (dated 1856) in the
custody of the Bishop of Gloucester and
Bristol



ST. PETER'S ABBEY, GLOUCESTER.—PLANS AND ELEVATIONS OF THE OLD EPISCOPAL PALACE, FORMERLY THE ABBOT'S LODGINGS.

the best in the countrie, as the honorable service of his house deserved no lesse; the benevolence therof, with the releefe and almesse of the hole Covent was alwaies oppen and fre, not onely to the poore of the cite of Durham but to all the poore people of the countrie besides.¹

We must now pass to the cellarer's buildings and "casual ward" in the outer court.

Concerning these buildings we have very little historical evidence, nor are there any remains of importance to enable us to re-construct their plans and arrangements.

The first notice of the buildings in the outer court is of their being almost all burned in the fire that destroyed great part of the city in 1190.

In 1300, on the feast of the Epiphany, a fire began in a timbered house in the great court, from which it spread to the small bell-tower, the great *camera*, and the cloister.² This bell tower was perhaps a Norman north-west tower, and the great *camera* must I think be the abbot's house, now the deanery. The wooden house whose burning began the mischief was probably therefore on the north side of the court.

In 1395 the king's justiciars were entertained by the abbot at a solemn and sumptuous feast "in the great hall in the court of the abbey."³ This of course may have been the abbot's own hall on the north side of his old lodging, but it is more likely to have been the great guest hall under the charge of the cellarer.

Thomas Horton while abbot (1351-77) built the "covered *camera* of the monks' hostelry and the great hall in the court where the king afterwards held his parliament."⁴

This parliament is said to have been held in 1378 in the *aula hospitum* or guessten hall, so that the *magna aula* and the *aula hospitum* are one and the same building. Adjoining it was a guest's chamber (*camera hospicii*), where the privy council met. "which was anciently called the king's chamber on account of its beauty."⁵

¹ *Rites*, 76.

² See note *supra*.

³ "In magna aula in curia abbatic." *Cott. MS. Dom. A. viii. f. 136b*; and Hart, i. 38.

⁴ "Item cameram monachorum hostolarie coopertam et magnam aulam in curia ubi postmodum rex parliamentum

suum tenuit crexit." *Ibid. f. 140b*; and Hart, i. 50.

⁵ This parliament sat from 22nd October to 16th November, 1378. The king (Richard II.) stayed sometimes at Gloucester, sometimes at Tewkesbury. The account of his visits to Gloucester furnishes some curious evidence con-

It appears from these extracts from the Chronicle that the hall where the judges feasted in 1305 was rebuilt by Horton, together with other buildings for the accommodation of guests. Where they stood is doubtful, but most likely in the south-west part of the court, where some old remains still exist in the houses there. As to their probable arrangement I cannot do better than again quote from *Rites of Durham*:

There was a famousse house of hospitallitie, called the GESTE HAULE, within the Abbey garth of Durham . . . the Terror of the house being master thereof, as one appoynted to geve intertaynement to all staits, both noble, gentle, and what degree so ever that came thether as strangers, ther interteynment not being inferior to any place in Ingland, both for the goodnes of their diett, the sweete and daintie furneture of there lodgings, and generally all things necessarie for travailleurs. And withall, this interteynment contynewing, not willing or commanding any man to departe, upon his honest and good behavvour. This haule is a goodly brave place, much like unto the body of a Church, with verey fair pillers supporting yt on ether syde, and in the mydest of the haule a most large ranche for the fyer. The chambers and lodginges belonging to yt weare so swetly kept, and so richly furnyshed that they weare not unpleasant to ly in, especially one chamber called the KYNGS CHAMBER, deservinge that name, in that the King him selfe myght verie well have lyne in yt, for the princelynes therof. The victualls, that served the said geists, came from the great Kitching of the Prior, the bread and beare from his pantrie and seller. Yf they weare of honour they weare served as honorably as the Prior himselfe, otherwise according to ther severall callinges. The Terror had certaine men appointed to wayte at his table, and to attend upon all his geists and straungers, and, for ther better intertaynement, he had evermore a hogshede or two of wyne lying in a seller appertayninge to the said halle, to serve his geists withall.¹

Among the officers of the household mentioned in the survey of 1540 we find "Tho^s ap Morgan Porter at the

cerning the monastic buildings and the uses to which they were put:

"Sed cum esset Gloucestrie tam ille quam tota familia sua in abbatia hospitabatur que eis in parlamento ita undique erat impleta ut conventus per aliquot dies in dormitorio postea vero in domo scole ntilius consultus tam diebus carnium quam piscium durante parlamento necessitate urgente integro manducaret. quibus diebus in pomerio eorum prandium parabatur. Igitur in refectorio de armorum legibus tractabatur, aula autem hospitum communi parlamento erat deputata. Porro in camera hospicii que Camera Regis propter ejus pulchritudinem antiquitus

vocata est consilium secretum inter magnates versabatur ac in domo capituli consilium commune. Martilogium hiis diebus preter in diebus festis quibus quisque abierat in sua in choro legebatur nulla mentione de ordine propalata. Nempe omnia loca in monasterio patencia sic ad parlamentum venientibus frequentata fuere ut magis loca nundinarum quam religiosa cernentibus apparent. Nam viridum claustrum tanta luctancium et ad pilam ludentium exercitatione extitit deplanatum quod nulla viriditatis vestigia in ibi sperabantur." *Cott. MS. Dom. A. viii. f. 141b.*; and Hart, i. 53.

¹ *Rites*, 76.

hall door & verger" and "Walter Holder & Robert Harryson wayte in the hall."

Of the "casual ward" I have met with no historical evidence. It probably formed part of a long range of buildings extending southwards from the abbey gate along the west side of the court, where the lower part of a wall with a chamfered plinth still remains as the street boundary.

Finally there were the almonry buildings, of which also we have no historical record. They perhaps stood between the great gate and the inner gate.

This inner gate gave access to the inner court, known of late years as Miller's Green, where the bakehouse, boulting house, brewhouse, stable, mill and such like offices were placed. It was also the way to the later abbot's lodging. The existing gateway is of the 14th century, and has a single passage, in the west side of which is a blocked doorway. The passage is covered by a lierne vault.

Of the buildings in this inner court we know very little. The bakehouse evidently stood in the corner by the great gate, for a settlement made in 1218 with St. Oswald's priory mentions a boundary line descending in a direct line from the garden through the frater, larder, and bakehouse as far as the new wall next St. Oswald's.¹ Next to it was the brewhouse and another building, for a fire that in 1223 destroyed all St. Mary's parish before the abbey gate also burned "part of the bakehouse and brewhouse, and a house between the gate and the stable." Perhaps however this house and stable were in the other court.

The mill stood on the north side of the inner court. A millstone still remains in a cellar of a house on the site. John the miller was also one of the officers of the household at the suppression.

Of the positions of the abbey gates and divisions of the precinct I have already spoken.

The great gate, which stands nearly in the middle of the west wall of the precinct, is a fine example of the thirteenth century. It has a gate porch entered by a wide but low pointed arch, with an inner arch where the doors were

¹ See note, *ante*.

hung. The gatehall thus formed also had doors towards the court and in its south wall are two recesses. The upper story has towards the street an arcade of four arches. The outer pair have each a trefoiled niche or panel in the back. The other two arches are of larger size and are both pierced with two interesting square-headed lights, also of the 13th century, with dividing mullions. In the gable, within a large triangular panel, is a niche of three arches originally carried by detached shafts, but these are now broken away.

The gateway on the south side, towards the city, has been almost entirely destroyed, and only a fragment of the west side remains. It was known as "King Edward's Gate" from its having been built by Edward I., "*qui portam illam hujus monasterii ejus nomine insignem construxit.*"¹ It was afterwards "restored and beautified" by abbot Malverne *alias* Parker (1514–1539), "*qui portam illam hujus ecclesie meridionalem Edwardi regis nomine ut ante insignitam et palatii episcopalis januam ampliavit et adornavit.*"²

The remaining turret of the gate, on the west side towards the church, is probably part of Parker's work. To Parker also we may perhaps attribute the small cemetery gate to the east of King Edward's gate. It retains a flattened archway flanked by canopied niches, but the upper part has been destroyed.

Concerning the water supply a good deal has yet to be made out, especially as to the lines of the service pipes and the exact course of the main drains.

As was nearly always the case, there seem to have been at Gloucester two water supplies, one for drinking, washing, and domestic purposes generally; the other for keeping the drains clear and turning the mill.

The fresh water was usually led by pipes from some reliable source of supply to a main conduit, from whence it was distributed by a regular system of pipes to the different places where it was wanted.

At Canterbury, where we know for certain the whole system of the waterworks from a twelfth century drawing, the water was first received in a conduit in the infirmary cloister, and from thence it passed to a second conduit in the

¹ *Memoriale* in Dugdale, i. 564.

² *Ibid.*

great cloister, whence it was distributed to the various parts.¹

Such a conduit was made at Gloucester by Helias of Hereford, who was sacrist in 1222 and till 1237,² and some remains apparently of it were found a few years ago in lowering the cloister garth. From these pieces the conduit seems to have been placed above a lavatory, the bason of which was multifoil in plan; the arrangement resembled in fact that at Durham, which was "a fair LAVER or CONNDITT, for the Monncks to washe ther hands and faces at, being maid in forme round, covered with lead, and all of marble, saving the verie uttermost walls. Within the which walls you may walke round about the Laver of marble, having many litle cunditts or spouts of brasse, with xxiiij cockes of brasse, rownd about yt, havinge in yt vij faire wyndowes of stone woorke, and in the top of it a faire DOVE-CORTE, covered fynly over above with lead, the workmanship both fyne and costly."³ The base of another such laver and conduit, of very fine Transitional work, remains in place at Wenlock Priory.

In the time of abbot Reginald (1263-84) a grant was made to St. Oswald's priory of the superabundant water in the lavatory, which the canons might draw off and lead to the priory.⁴

The second water supply, that for clearing the drains, etc., was obtained from the Crown in the reign of Henry I., who granted and confirmed to the monks "the water which is called Fulbrook, which runs beside their abbey, that they may turn and dispose it and draw it off through their offices at their pleasure."⁵ The course of this has been fairly accurately determined and laid down on plan, but there is still much to make out. The Fulbrook entered the present precinct on the east, near the site of the Roman north gate, and about 90 feet north-east of

¹ See Professor Willis's admirable explanation in vol. vii. of *Archæologia Cantiana*.

² "Anno Domini M^o.CC^o.xxxvij^o. quinto idus Novembris obiit Helias de Herefordia monachus qui . . . conductum aque vive fecit." *Cott. MS.* Dom. A. viii. f. 133; and Hart, i. 28.

³ *Rites*, 70.

⁴ "Quod possint de aqueletio seu lavatorio nostro aquam ibidem super-

abundantem extrahere et usque ad prioratum suum deducere." Hart, i. 172.

⁵ "Rex Henricus senior concessit et carta sua confirmavit monachis Sancti Petri Gloucestrie aquam que vocatur Fulbrok que currit juxta abbatiam suam ut veriant et disponant eam et trahant per officinas suas secundum voluntatem suam." *Cott. MS.* Dom. A. viii. f. 119b; and Hart, i. 78.

the chapter house was divided into three branches. The central or main branch proceeded across the infirmary cloister, under the passage at its north-west corner, and straight thence to the mill, where it turned at a sharp angle, but just before it reached the inner gate it was again turned westward out of the abbey precinct. A branch of it turned off just beyond the site of the kitchen, and after skirting the buildings immediately south of the frater, passed under the north end of the deanery into the outer court, back through the inner gatehouse, and then joined the main branch.

The second branch passed under the farmery and abbot's new lodging on the north, and rejoined the main stream just before it entered the mill. The third branch has not been traced to its junction with the main stream. It however passes across the north side of the cloister garth and was there intercepted by a curious tank found in 1889. This tank at its lower or western end had a sluice gate to dam the water if necessary for flushing purposes, and from it the drain continued under the present deanery to join the sub-branch of the main drain.

In conclusion I must express my indebtedness to Mr. F. S. Waller for much valuable information and kind help, and for the loan of various plans and drawings of the monastic buildings.

I have also to thank my friends the Rev. J. T. Fowler, D.C.L. F.S.A., Mr. J. T. Micklethwaite, F.S.A., Mr. J. W. Clark, M.A. F.S.A., and the Rev. W. Bazeley, M.A., for various useful criticisms and kind suggestions.

I am also much indebted to the Very Rev. the Dean of Gloucester for affording me every facility in my examination of the church and abbey buildings.

The engravings of the cloister, the lavatory, and the chapter house have been obligingly lent by Mr. John Murray, F.S.A.

APPENDIX.

The letters patent of Henry VIII., dated 3rd September 1541, founding the See of Gloucester, assign to the Bishop all the premises formerly occupied by the Abbot, in these terms :

Et quia volumus dictum Episcopum Gloucestrie et successores suos honorifice dotari damus et per presentes concedimus eidem Episcopo totam illam aulam nostram plumbo coopertam [*sic*] vulgariter vocatam plumbam [*sic*] aulam ac unum panarium unum promptuarium cum una coquina duobus domiciliis ad cibaria repouenda ac unam parvam quadratam cum quodam stagno sive vivario ad quod refluit aqua dulcis scituat et existent in orientali fine ejusdem aule Neenon unum magnum cubiculum in quo servi quondam Abbatibus edere solebant scituatum et existens in fine occidentali diete aule ac eciam unum panarium unum promptuarium et unam subterraneam officinam cum quadam via ducente ad eandem scituat et existent in australi parte ejusdem magni cubiculi ac eciam quoddam quadratum seu locum vacuum continens per estimacionem in longitudine duas perticatas ac in latitudine unam perticatum et tres pedes eidem magno cubiculo adjacens Neenon unum aliud Cubiculum communiter vocatum quadratum cubiculum scituatum in boriali parte dicti magni cubiculi cum tribus aliis cubiculis super dictum quadratum cubiculum superedificatis.

Ac unum aliud magnum cubiculum in quo dudum abbas dicti nuper Cenobii edere solebat cum uno panario uno promptuario et una subterranea officina scituatis et existentibus in australe fine ejusdem cubiculi Ac eciam unam domum deambulatoriam scituatam in dicto fine australi ac ex parte orientis ejusdem cubiculi ac unum cubiculum scituatum in australi parte ejusdem deambulatorii cum tribus cubiculis insimul constructis et scituatis in boriali parte ejusdem deambulatorii ac eciam omnia illa tria interiora cubacula cum uno meditullio una Capella et alia domo deambulatoria eisdem tribus cubiculis annexis et dicto nuper Abbati pecuiliaria scituata et existentia in boriali termino dicti magni cubiculi in quo dudum Abbas sedere solebat et ex parte orientali ejusdem cubiculi Neenon unam aliam aulam unum panarium unum promptuarium unam coquinam et duo cubacula scituata et existentia in fine orientali ejusdem deambulatorii.

Ac eciam omnia et singula cubacula domos edificia officinas subterraneas et alias officinas quascumque scituatas sive edificatas subtus aut supra dictas aulas cubacula deambulatoria et cetera omnia et singula premissa aut subtus vel supra aliquam inde parcellam neenon quendam ortum continentem in longitudine per estimacionem sex perticas et decem pedes ac in latitudine septem perticas et tresdecim pedes et dimidium Qui quidem ortus in longitudine protenditur et extendit se ante dicta tria interiora cubacula et cetera edificia dicto nuper Abbati pecuiliaria ac eciam omnia et singula

mesuagia habitaciones domos edificia structuras cum terra et solo eorundem ortos pomaria loca vacua muros et cetera omnia et singula hereditamenta quecumque cognita per nomen vel per nomina de *le Abbote Lodgyng* seu scituata et existencia infra totum illum precinctum circuitum et ambitum cognitum seu appellatum *le Abbote Lodging* qui quidem circuitus continet in parte australi novem perticatas et decem pedes et in boreali parte novem perticatas et sex pedes ac in termino occidentali octo perticatas novem pedes et octo polices ac in fine orientali octo perticatas et sexdecim pedes qualibet perticata continens in se octodecim pedes dimidium et tres polices. Que quidem aule domus edificia deambulatoria ac cetera omnia et singula premissa necnon terras et solum eorundem scituantur jacent et existunt infra precinctum dicti nuper Cenobii sive Monasterii. * *

Ac etiam volumus quod dicta mesuagia habitaciones aule cubacula ac cetera omnia et singula premissa decetero censeantur nominentur et appellentur Palacium Episcopi Gloucestrie et successorum suorum.

This interesting description of the Abbot's lodging may be thus translated :

"And because we will that the said Bishop of Gloucester and his successors be honourably endowed, we give and by these presents grant to the same Bishop all that our hall covered with lead commonly called the "leaden hall," and a pantry and a buttery, together with a kitchen, with two little houses for storing food, and a small court with a certain pond or stew to which fresh water flows, situated and being at the east end of the hall.

Also a great chamber in which the servants of the late abbot were wont to eat, situated and being at the west end of the said hall, and likewise a pantry, a buttery, and an underground cellar, with a certain way leading to it, situated and being on the south part of the same great chamber; also a certain court or waste place, containing by estimation 2 perches in length and 1 perch and 3 feet in width, adjoining the same great chamber.

Also one other chamber, commonly called the court chamber, situated on the north part of the said great chamber, with three other bedchambers built over the said court chamber.

Likewise one other great chamber in which the late abbot of the said late House was wont to eat, with a pantry, a buttery, and an underground cellar, situated and being in the south end of the same chamber. And also a gallery (or walking-place) situated in the said south end and on the east part of the same chamber, and a bedchamber situated on the south part of the same gallery, with three bedchambers together constructed and situated on the north part of the same gallery; and also all those three inner bedchambers with a middle chamber, a chapel, and another gallery adjoined to the same three bedchambers, and privy to the said late abbot, situated and being on the north end of the said great chamber in which the late abbot was wont to eat, and on the east part of the same chamber.

Also one other hall, a pantry, a buttery, a kitchen, and two bedchambers, situated and being at the east end of the same gallery.

And also all and singular the chambers, houses, buildings, under-

ground cellars, and other offices whatsoever, situated or edified under or over the said halls, chambers, galleries, and all other and singular premises, or under or over any parcell thereof.

Also a certain garden containing in length by estimation 6 perches and 10 feet and in width 7 perches and $13\frac{1}{2}$ feet. Which garden is prolonged and extends itself before the said three inner bedchambers and the rest of the buildings privy to the said abbot.

And also all and singular the messuages, dwellings, houses, edifices, and structures with the land and soil of the same, the gardens, orchards, waste places, walls, and all other and singular hereditaments whatsoever, known by the name or by the names of 'the Abbottes Lodgyng' situated and being within all that precinct, circuit, and court known or called 'the Abbottes Lodging,' which circuit contains on the south part 9 perches and 10 feet, and on the north part 9 perches and 6 feet, and at the west end 8 perches, 9 feet and 8 inches, and at the east end 8 perches and 16 feet, each perch containing in itself $18\frac{1}{2}$ feet and 3 inches.

Which halls, houses, edifices, galleries, and all other and singular premises, also the lands and soil of the same, are situated, lie, and be within the precinct of the late House or Monastery. * * *

And likewise we will that the said messuages, dwellings, halls, chambers, and all other and singular premises whatsoever be deemed, named, and called the Palace of the Bishop of Gloucester and his successors."

The foregoing transcript is from the Patent Roll, 33 Henry VIII. part 2. m. $\frac{38}{9}$. The original letters patent are now, most improperly, in the custody of the Mayor and Corporation of Gloucester. The document is printed in full in Rymer, *Foedera*, xiv. 724, etc. and in Dugdale, *Monasticon Anglicanum*, ed. Caley, Ellis, and Bandinel (London, 1817), i. 553, etc. A translation will be found in Rudder's *History of Gloucestershire*, Appendix, p. xiii. and in W. H. Stevenson's *Calendar of the Records of the Corporation of Gloucester* (Gloucester, 1893), 19-26.

Proceedings at Meetings of the Royal Archaeological Institute.

February 3rd, 1897.

JUDGE BAYLIS, Q.C., V.P., in the Chair.

The CHAIRMAN announced that the Annual Meeting would be held at Dorchester from August 3rd to August 10th, under the presidency of General Pitt-Rivers.

The Rev. CANON RAVEN, D.D., F.S.A., exhibited three Roman coins found at Burgh Castle, Norfolk, the ancient *Gariannonum*. Two were of the Constantine period and one consular, of C. Memmius.

Mr. R. GARRAWAY RICE, F.S.A., exhibited a small unfinished miniature on ivory, supposed to be a portrait of one Crossfield, who, with others, was accused of a conspiracy to assassinate George III.

Mr. GEORGE E. FOX, F.S.A., read the second and concluding portion of his paper on "Uriconium," the Roman city at Wroxeter, near Shrewsbury. Referring to the first part of the paper, read last November, Mr. Fox mentioned that the general aspect of the site had then been treated of, that the line of the city walls had been traced, and the various discoveries described which had been made within the walls from the beginning of the last century to the middle of the present one. He then proceeded to explain in detail the remains of the buildings found in the excavations made from the year 1859 to 1861, and again in 1867, during which years the principal public buildings of the Roman city were uncovered. These formed a group in the centre of the site, and comprised the basilica and the baths, with various adjuncts. Mr. Fox urged the desirability of further excavations on the site, which might be expected to yield even better results for archæology than those achieved in the excavations at Silchester, though these had been considerable.

Plans and photographs of the remains and drawings of architectural details from Wroxeter were exhibited in illustration of the paper, together with examples of *tesserae* from the floor of the basilica to show the materials used in the mosaics of Uriconium.

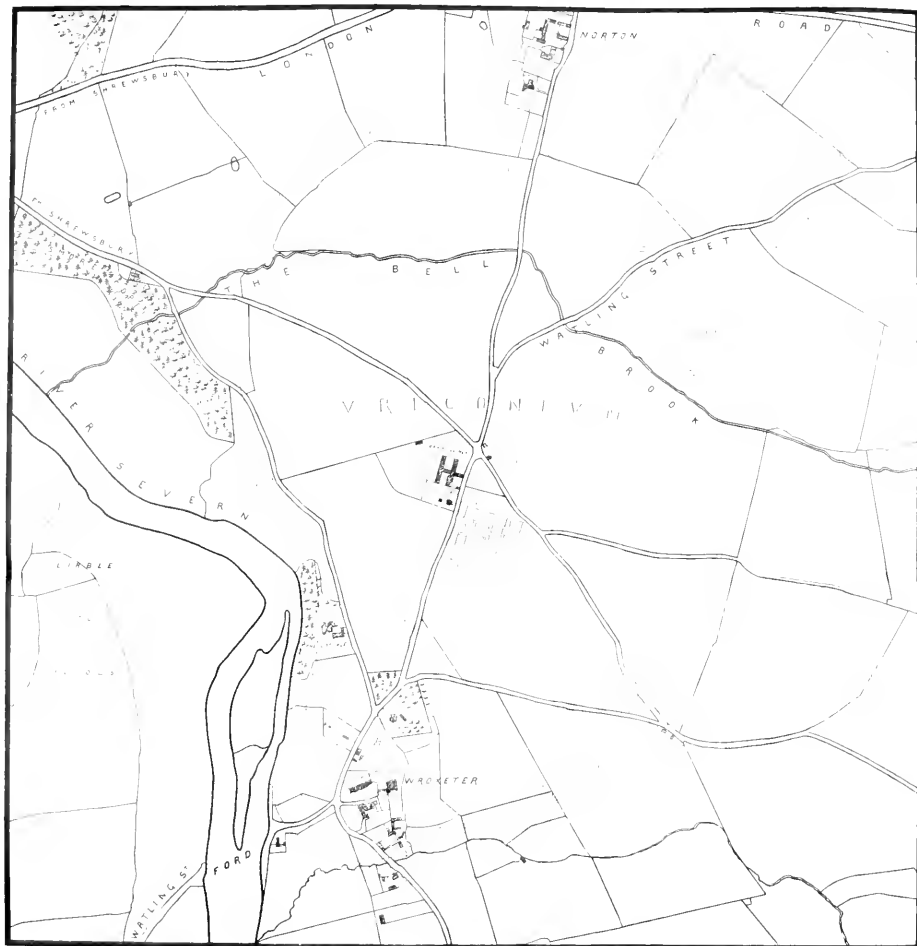
March 3rd, 1897.

CHANCELLOR FERGUSON, F.S.A., in the Chair.

Mr. H. WILSON exhibited a small Roman bronze figure found at Sidecup, Kent, in digging the foundation of a house. Mr. Ely identified the figure as probably Dionysus or Bacchus wearing the fawn skin.

Mr. H. P. FITZGERALD MARRIOTT read a paper on "Family Portraits at Pompei." Mr. Marriott endeavoured to show that all the pictures containing faces of men and women were not attempts at the delineation of heroic and mythological characters, as had previously been surmised, but were family portraits of the owners and inhabitants of the houses. Mr. Marriott stated that many of the paintings were in a very dilapidated state, by reason of their age as well as by their being injured by a small snail which works behind the painting; but of the more perfect specimens about fifty-one have been copied. Mr. Marriott exhibited photographs of about half that number, and criticised the different styles. Portraits are never found in the first or relieve style of decoration of the pre-Roman epoch. It was doubtful if they existed in the second, or period of the Republic; but in the third and delicate style of the first emperors, about A.D. 1-50, several portraits, all enclosed in square or oblong borders, but never round, are to be found. One of the earliest of these is that in the house of Marcus Epidius Sabinus. The great mass of the portraits are to be found in the fourth style, and most of these have been inserted in the walls after having been painted on an easel or on horizontal surfaces. Mr. Marriott gave a critical description of many of these in support of his theory.—In the discussion that followed Mr. Talfourd Ely and Mr. Fox, although admitting that several of the paintings were in all probability intended for portraits, yet could not but believe that the others were merely conventional subjects.

Mr. Marriott's paper is printed at p. 10.



URICONIUM.¹

By GEORGE E. FOX, Hon. M.A. Oxon., F.S.A.

In the following paper it is not proposed to enter into the history, legendary or otherwise, of the Roman city usually known by the name of *Uriconium*, though doubtless written with more correctness, *Viroconium*.² The site is now called Wroxeter from the village of that name in Shropshire, five miles from Shrewsbury, which occupies a small portion of the area enclosed within the line of its ancient walls. Nor will any space in the following account be devoted to the speculations based upon the inscribed stones dug up in the cemetery which lined the road to one of its gates.

This paper is intended to serve solely as a record of all the discoveries having a bearing upon the fabric of the Roman city; to trace its area and defences; to describe, as far as they are yet known, its public and private buildings, and to give as faithful a note as possible of such of the architectural detail which formed part of them as can now be found either on the site or dispersed in the vicinity.

First, as to the site, which lies between three and four miles from the foot of the Wrekin, the well known mountain of Shropshire, and in the valley of the Severn, at half a mile from the spot where that great river receives the waters of the Tern.

The area of the Roman city, which is about 170 acres in extent, is enclosed by a mound and ditch, the direction of whose line can only now be vaguely made out, except at a few points where the depth and width of the fosse and the elevation of the mound (covering the remains of the destroyed wall) are very clearly to be seen in the fields, notably at B1 and A1 on the general plan (No. I).

¹ Read at the Monthly Meetings of the Institute, November 4th, 1896, and February 3rd, 1897.

² The better known form of the name is adopted here to avoid confusion in matters of reference.

Though the line of circumvallation is not easily traceable, the direction of the hedges separating the fields around the site of the city on the east, and more especially on the north, show its boundaries on those sides with considerable distinctness, the limits of these fields having evidently been governed by a barrier (the city wall and ditch) existing when they were first laid out.

The circumference of the area is about three miles. It may be described as pear-shaped in form, the broadest part being on the north and the greatest length from north to south. A rivulet, called the Bell Brook, traverses the northern end, to fall into the Severn, cutting it off from the rest of the site. The valley of the little stream gives a marked and strongly undulating character to the upper part of the enclosed area, which otherwise slopes gently from the centre towards the west. Where, however, the river Severn, making a great bend to the south, strikes the western side and divides into two branches (enclosing a long, flat island), the ground is of considerable height, and falls steeply to the stream, forming a long, low cliff for some distance on this side. At the lower end of the island mentioned is a ford, which was the probable cause of an early settlement here on the river.¹

The village of Wroxeter, with its church dating from Saxon times, lies in the extreme southern end of the area of the Roman city.

From the peculiar shape of the enclosing lines of the city (A.A. in Plan No. I) two theories suggest themselves—(1) that the walls of the Roman town were built on the lines of a Celtic *oppidum*; or (2) that the town, having gradually grown up beside a line of ancient roadway leading to a well-frequented ford over the Severn, a wall was afterwards built to enclose as nearly as possible the straggling town and its suburbs.

Either theory might be supported from the remains; but there is no evidence to be derived, either from the shape of the enclosing barrier or from the material or arrangement of the buildings as yet found within it, that the city

¹ Camden speaks of the Severn as more easily fordable here (*i.e.*, at Wroxeter) than in any other part of its course between this point and its mouth.

owed its origin to the sojourn here of any division of the forces of Rome.¹

It will be seen, by reference to Plan No. I, that a modern road traverses the site issuing from the walls near K on the north, where traces of a Roman street were found in 1859,² and near C on the south, at which point was probably situated the south gate of the Roman city. It seems in all likelihood that this road, though diverted from the straight line at its southern end, fairly represents the ancient main thoroughfare through the city, especially as the more important discoveries have been made not far from either side of it. As nearly as possible half-way between the two points mentioned, C and K, occur the principal buildings of the Roman town, the *basilica*, Baths, &c., together forming a square or *insula* of buildings probably facing one side of the *forum*, of which more will be said later on.

As to the other streets or roadways of the ancient city, it appears to have been ascertained that the Watling Street, one of the four great Roman ways, entered the town at or near the point B (Plan No. I), and that it was lined on each side by cemeteries before reaching the city gate. Its continuation within the walls, if represented by the modern road, struck the main street at an acute angle shortly after crossing the Bell Brook.

Arguing from the analogy furnished by the plans of Silchester and St. Albans, it is probable that Uriconium was, like the towns named, laid out in squares formed by the streets crossing each other generally at right angles.

Other main streets of the Roman town than those already named may perhaps be traced in the road running from the north wall of the *basilica* to the wall of the city, and in the next road south of it and parallel with it, also running to the wall; but this is mere conjecture. It is only by extensive excavation that the plan of the ancient city can be recovered.

There are some indications of the construction and width of the roadways. Parts of the roadways bounding

¹ No tiles bearing the stamp of either legion or cohort are reported to have been discovered at Wroxeter, nor is there a trace to be found on the site of any quadrangular enclosure formed

either by walls or mounds such as would indicate a regular camp.

² Thomas Wright, *Uriconium*, 1872, p. 106.

on the north and south the square or *insula* just mentioned have been found and examined. The sections made on the south side of this *insula* showed the pavement of a street "formed of small stones such as might be gathered from gravel, well put together and hard beaten in, and presenting an appearance not much unlike that we call macadamising."¹ This paving was bounded by what appeared to be side walks on one, if not both, sides, laid with concrete and edged with kerb stones. The side walks may have been respectively 9 feet, the roadway 24 feet wide, thus giving a total width of 42 feet for this street, no doubt one of the principal thoroughfares of the city.

There is yet little or no evidence to show what system of drainage was employed for the roadways, but it may have been by gutters at the sides either against the houses or lining the kerb stones of the side walks. This short description exhausts all that can be said as to the position and plan of the Roman town. We will now turn to examine what remains of its defences.

The first mention of them seems to be that in *Magna Britannia* in 1727, where it is stated that "it (the city) was encompassed with a wall, built upon a Foundation for the most Part made of Pebble stones, about three yards thick, and a vast trench round it, which in some places appears exceeding Deep at this Day." This statement received a general confirmation in the excavations made in the year 1861-2 at various points of the south east and north sides of the city. In each of the cuttings then made,² the foundation only of the wall was found (except in one spot at K), consisting of cobble stones and broken quarry stones bedded in clay. This bed was from 7 to 8 feet wide, but was probably originally about 3 yards wide, as stated in *Magna Britannia*.

The excavations made at A1, Plan I, in these two years uncovered the traces of a berm and ditch in front of the foundations of the wall. The berm was perhaps 11 feet wide; the ditch had a width of 95 feet, with a flat bottom. On the inner side it sloped from the edge of the berm to the bottom at an angle of 45 degrees; on the outer it had a rather steeper inclination. Both inner and

¹ T. Wright, *Uriconium*, p. 185.

² See plans by Mr. Hillary Davies,

preserved in the Museum at Shrewsbury.

outer sides of the ditch were formed of a mass of clay. In the account followed here of these discoveries,¹ the measurements given for the depth of the ditch are 3 feet at its outer, and 9 feet at its inner, edge. These can only refer to the level of silting of the ditch, and have nothing to do with its original depth. There is no doubt that wall and ditch were carried round the city, although the writer on whom we have so often to rely (Mr. Thomas Wright) supposes that the steep bank of the Severn alone formed a sufficient defence on the western side.²

With respect to the gates of the great enclosure thus defended, next to nothing is known. There certainly must have been an entrance near K (Plan I) at the north end of the main road traversing the city from north to south. Excavations were made at this spot in 1862; but although a portion of the wall deprived of its facings remained to a height of 4 feet above the foundations, no gate seems to have been noted here. The search carried on at the point B (Plan No. I), where the Watling Street entered the city, showed a sudden discontinuation of the wall at that point, but nothing more.³

Scarcely better luck attended an endeavour at an earlier period (in 1859) to discover the south gate. This was an important gate, as the main thoroughfare of the city from north to south issued from it to continue on its way to *Magna*. It is a question whether this road passed from the south gate to the ford across the Severn previously referred to, or whether, taking a more direct course from the gate in a line with the principal street of *Uriconium*, it struck the river some way south of the ford, and was carried across it by a bridge. Remains of this bridge are

¹ T. Wright, *Uriconium*, Chap. II, p. 94 *et seq.*

² *Op. cit.*, p. 95. The supposition that a steep bank with a river or sea at its base was considered a sufficient substitute by the Romans for a wall, can scarcely now be maintained, as far as Roman remains in this country are concerned. In all three instances cited by Mr. Wright in support of this theory, viz., the stations of Burgh Castle in Suffolk, and of Richborough and Lympne in Kent, the foundations of a wall next the waterside of each station have been found.

³ Lately, however (in 1896), at the spot marked B I, Plan No. I, large stones have been uncovered by the plough, and it is possible they may indicate (for they lie on the line of the wall) the position of the gate sought for in vain in 1861. At this point the ancient defences of the town can be very plainly observed as they descend into the valley of the Bell Brook and cross the Watling Street. The width of the ditch fully justifies the description given in *Magna Britannia* of its being a "vast trench, exceeding deep."

said to have been found. That the road ran to a bridge is the view put forward by Wright, who says: "It (the bridge) may have been built at this point (a point south of the ford) as less exposed to the violence of the water in great floods, than under the city, where the force of the stream would be increased by the resistance of the hill on which it was built. If the paved ford be Roman, it was probably used as a convenient passage of the river when the season allowed. In this case, perhaps, at the time of the ruin of the city, the bridge also was destroyed, and afterwards in the middle ages people made for the ford to cross the river, and the old road was abandoned altogether."¹

The excavations of 1859 which were made on a knoll at the foot of the roads somewhat above C (Plan No. I) brought to light no trace of the south gate as expected, but they uncovered the remains of a small square tower with a wall attached to it. These remains showed no decided Roman character, and may have belonged to some small post built in the middle ages to command the ford; and this appears the more likely, as it is believed that the Earls of Arundel had a stronghold at Wroxeter in the fourteenth century. At the same time, it must be remarked, that only Roman objects were found in digging here, amongst them being, according to Wright, a sculptured head in stone from some Roman building.²

All that is yet known regarding the general plan and defences of the city having now been treated of, the details of discoveries relating to public and private edifices made within the walls will next engage our attention. Mosaic pavements are included under this head, as they indicate the presence of dwellings, and are often the only remains noted of such dwellings. The discoveries will be given as far as possible in chronological order.

The only relic of the Roman town to be seen above ground (save scattered architectural fragments) before the extensive excavations were commenced in 1859, was a long mass of masonry standing in the centre of the site

¹ *Uriconium*, pp. 100-101.

² *Op. cit.*, p. 101. With respect to sculptured head mentioned, if it be

the one preserved in the Shrewsbury Museum, it is unquestionably mediæval.

(at D, Plan I). It was 21 feet high, 72 feet in length, and 3 feet in thickness. Camden spoke of it as known in his time by the name of "the Old Worke." It still stands a rugged and conspicuous ruin in view of all passing through the ancient site. It will be seen further on that it formed part of the *basilica* of the Roman town. It is mentioned here as the earliest recorded fragment of Roman work at Wroxeter, and also because it is a point from which the position of other remains have been determined, as, for instance, in the following case, which is the first discovery to be mentioned.

This occurred in the year 1701, and is thus described in *Philosophical Transactions*: "About 40 Perches distant North from a ruinous Wall (the one just spoken of) call'd the *Old Work of Wroxeter*, once *Uriconium* a famous city in *Shropshire*, in a piece of Arable Land, in the Tenure of Mr. *Bennet*, he observed that altho these Fields had formerly been fertilized and made very rich by the Flames and Destruction of the City, yet a small Square Parcel thereof to be fruitless, and not to be improved by the best Manure. He then guessing the Cause of Sterility to be underneath, sent his Men to dig and search into it; but the Soil being then unsown, caus'd them to mistake, and search in a wrong place; where they happen'd upon Bottoms of old Walls, buried in their own Rubbish (being such as are often found in those Fields;) and the Inhabitants digging one of them up for the benefit of the Building Stone, were thereby guided to the Western corner of the said unprofitable Spot of Land: Where they found (near the Foundation) a little Door place, which when cleansed, gave Entrance into the vacancy of a square Room, walled about and floor'd under and over, with some Ashes and Earth therein.

This was built in times past (as some suppose) for a *Sudatory* or *Sweating-house* for Roman Souldiers; set with 4 Ranks of small Brick Pillars 8 inches square and laid in a strong sort of very fine Red Clay; each Pillar being founded upon a foot square quarry of Brick; and upon the head of every Pillar was fixed a large quarry of 2 foot square, hard almost as Flint, as most of those *Roman* Bricks are, and within as Red as Scarlet, and fine as Chalk. These Pillars were to support a double Floor,

made of very strong Mortar, mixed with coarse Gravel, and bruised or broken Bricks: The first of these Floors was laid upon the large quarries, and, when dry, the second Floor was laid upon it.

But first there was a Range or Rank of Tunnel-Bricks, fixt with Iron cramps up to the Wall within, with their lower ends level with the under sides of the broad quarries, and their upper ends with the surface of the upper Floor; and every Tunnel had alike 2 opposite Mortice-holes, one on either side, cut through for a cross passage to disperse the Heat amongst them all."¹

The spot where the hypocaust here described was found may be taken to be somewhere in a large field near the letter E in Plan No. I. It evidently served to warm a small room which may be guessed at about 10 feet square, appertaining no doubt to the winter apartments of some house at this spot, especially as in the account quoted mention is made of foundations dug up in its close vicinity. Wright also speaks of a report that buildings had been found under a smith's forge at the corner of the cross ways at the angle of the field (*see* F, Plan No. I), and that a large Roman capital forms the foundation for the smith's anvil. He also mentions that tessellated pavements were known to exist in this same field.²

The next discovery in point of date seems to have been that of a mosaic pavement, which possibly was uncovered in 1706, and may have come from the same field as that in which the hypocaust was found in 1701, but this is a matter of conjecture. It consisted of a square of fine tessellated work set in a ground of coarse blackish-green tesserae, the finer work showing a large rude flower in red and black surrounded by a narrow braid-work border the strands of which were black, red, and white. The panel thus formed could only have been of small size, and probably ornamented the centre of some

¹ *Philosophical Transactions*, Vol. XXV, pp. 22, 26, 27, 1706. "A Description of a Roman Sudatory or Hypocaustum, found at Wroxeter in Shropshire. Anno 1701." By Mr. John Lyster. Communicated to the Royal Society by John Harwood, LL.D. and F.R.S.

An engraving of this hypocaust is given.

In the eighteenth century the presence

of a hypocaust was supposed to imply the presence of a hot bath or sudatory, which was not always the case by any means.

A curious little model of this hypocaust made at the time of its discovery is still to be seen in the Museum at Shrewsbury.

² *Uriconium*, Chap. II., pp. 105-6.

chamber whose floor was composed of a ground-work of common material. Such arrangements of squares of fine work in coarse grounds are sufficiently well known in the remains of the floors of Romano-British houses.¹

Another pavement, but of rougher character and of larger size than the preceding one, was found in 1734. It probably was the floor of some small, long chamber with a semi-circular end. The pattern consisted, for the most part, of a series of rudely planned semi-circular lines in black on a white ground down the sides and across the ends of the floor, with an outer margin of blackish-green tesserae next the wall.

It is not possible to ascertain from what part of the site this pavement came.²

A far more important discovery than any hitherto named was made in the year 1788 in the field marked G in Plan No. I at a point a quarter of a mile from the banks of the Severn on ground sloping towards the south. Here the tenant, a farmer named Clayton, "having occasion for some stone to rebuild a smith's shop lately burnt down, and knowing by the dryness of the ground that there were ruins at no great depth beneath the surface of a field near his house, began to dig and soon came to a floor and a small bath. Application was made to William Pulteney, Esq., then the proprietor of the soil, for leave to open the ground farther, which was readily granted."³

It is well to note here the process of destruction of the Roman town. All the material above ground having been cleared away, even what the earth yet conceals is sought for and rooted up, and no doubt the process still goes on. But to return to the history of the discovery.

The investigations resulted in the uncovering of four contiguous chambers of varying size, together with traces of others. The first of these (No. 1, Plan II) was 10 feet

¹ This pavement is figured in colours, but not to scale, in a MS. volume by Thomas Farmer Dukes, entitled *Uriconium*, in the Library of the Society of Antiquaries of London. The volume bears date 1829.

² Figured in Dukes' volume, but also, like the former, not to scale.

³ For all relating to this discovery see *Archæologia*, IX, 323. *Memoir*

concerning the Roman baths discovered in the year 1788 at Wroxeter, the ancient Uriconium or Tiroconium. In a letter from the Rev. Mr. Leighton of Shrewsbury to Mr. Gough, Director, Plates XXI, XXII, plan and sections by Telford. Plan No. II, with the accompanying sections, in this paper, is a copy from that of Telford.

wide by about 19 feet 3 inches long; the length, however, was somewhat doubtful, owing to the southern wall having been entirely destroyed. The floor was paved with tiles each 16 inches by 12 inches and 1 inch thick, laid on a bed of mortar with a mass of rubble beneath it. At the north end of the chamber was a bath (*a*), the floor of which was 7 feet 3 inches long and, on the average, 2 feet 5 inches wide, with a depth of 2 feet 4 inches from the floor of the room. This depth was increased by a dwarf wall 1 foot 2 inches high, forming a seat, which parted off the bath from the rest of the room, a usual arrangement. Two steps, respectively 1 foot and 1 foot 4 inches deep, descended into it. Through the north wall, at the bottom (which was paved with tiles), was a drain (*b*) for carrying off the waste water. The sides and steps were covered with a coat of *opus signinum*, of great smoothness, and very hard.

The next chamber, No. 2, west of that just described, had the same length, and was 12 feet wide. It had been warmed by a hypocaust. The greater number of the *pilæ* took the unusual form of fragments of columns from some ruined edifice, supplemented where not of sufficient height by tiles placed upon them. These drums of columns were arranged in irregularly spaced lines. Some of the largest were close to the walls. "Some were apparently," says Mr. Leighton, "of a kind of granite, one foot six inches and one foot two inches in diameter."¹ Three of these *pilæ*, if not more, seem to have been complete columns of the dwarf variety not uncommon amongst the ruins of Roman buildings in this country. These had shafts 10 inches in diameter, and were all 3 feet 9 inches in height, which was the full height of the hypocaust. These columnar *pilæ* rested on a floor of mortar based upon rubble, and they were forty-eight in number. They did not, however, entirely fill the hypocaust. At the southern end a space 4 feet by 6 feet had been occupied apparently by pillars of the usual square tiles, only four of which remained at the south-west corner; and in the south-east corner stood a bath (*c*) supported on similar *pilæ*, which

¹ The "granite" mentioned was probably a sandstone grit. Architectural fragments, principally of shafts

of columns, in this latter material, are still to be seen at various places on the site.

were 1 foot 7 inches high. The bath was a very small one, the floor being only 2 feet 4 inches by 3 feet 4 inches, and it was not more than 1 foot 10 inches deep, with a step down into it on its eastern and northern side. A leaden drain pipe was found passing southward from it at *d*, with a fall of 3 inches in 12 feet. The join in the pipe was made by hammering the edges together, and the seam was stopped with a kind of mortar. The pipe was laid in a channel cut in large stones.

The southern wall of the room close to this bath had been pierced by the furnace flue (*e*) 1 foot 6 inches wide, which accounts for the presence of brick *pilæ* at this place, always employed in like positions, from the fact that stone will not stand direct and intense heat. In the west wall near the south-west angle, and at a point further north, were also openings to the hypocaust (*f, g*) only 9 inches wide. These, though filled with ashes when uncovered, were small for furnace flues to such a hypocaust, and were probably only used for raking out the ashes from the spot where they would most accumulate.

To complete the survey of this room it must be mentioned that its walls were in all likelihood jacketted with flue tiles, as the traces of such an arrangement were found close to the bath, and that the *suspensura*, which had completely disappeared, could not have been more than 6 inches thick.

The rooms at 3 and 4, adjoining those just described, had apparently at first formed only one large chamber warmed by flues in the floor. These flues took the shape of a cross, the ends of which joined other flues running at the foot of the walls, all round the chamber. The flues were 10 inches wide, with the exception of the one lining the north wall, which had a greater width, and were from 3 feet to 3 feet 9 inches deep. The furnace opening was at *h*.

Subsequently, this large chamber seems to have been divided by a wall at *i i*.¹

The floor of the additional room thus obtained was

¹ An error in the original plan, from which Plan No. II is copied, must be noted. The somewhat irregularly marked spaces on the west side of wall *i i* were said to "appear like single baths." They were, in fact, only holes made by

digging out the earth behind the retaining walls of the floor flues at this spot. Also, in no place do any indications of the wall flues appear in this plan. In all likelihood they were not looked for, or, if seen, were not understood.

lowered to the level of that of the old flues, and in this area a pillared hypocaust was constructed, the *pilæ* (of brick) being built on the lines of foundation of the retaining walls of the old flues, which flues ran in two places into the new hypocaust. At the same time, a new furnace opening was pierced in the east wall at *k*.

The original chamber may have been further divided, for, in the sections given by Mr. Leighton, there is a difference of 9 inches in the level of the floor of Room No. 3, this difference occurring at the edge of the flue, parting the room into unequal halves. It may be that the retaining wall *l l* of the floor flue was carried up as a partition, and thus the original chamber came to be divided into three smaller ones.

Traces are to be seen in No. 3 showing that it was floored with the tile tessellation common on many Roman sites, the tesserae being described in Mr. Leighton's account as pieces of brick $1\frac{1}{4}$ inches square. In the northern portion it was perfect, except where it had covered the tops of the walls of the flues and the flues themselves, which were exposed everywhere.

In the hypocaust of No. 4, says Mr. Leighton, "were found . . . several pieces of painted stucco, some of which were in stripes of crimson on a yellow ground, some in a decussated checquer of the same colours, others plain red, and others plain blue. There was found in this place a tile 2 feet square, pierced with many holes, which holes were wide at the lower side, and ended almost in a point at the upper side." This tile was probably one from the *suspensura* of the hypocaust, the holes in it having been made in the course of its manufacture to facilitate its more thorough baking.

To the east of the range of chambers described ran a corridor (No. 5) 7 feet 6 inches wide. Between 7 and 8 feet from the boundary wall of these chambers on the north it appears to have ended in a mass of masonry (*m*), possibly the support of a water-tank used for supplying the baths.

Some 3 feet further south, in the same corridor, is situated the furnace opening of the hypocaust of chamber No. 4 at *k*, and some way still further south a construction (at *n*), called by Mr. Leighton "a place 4 feet



C D

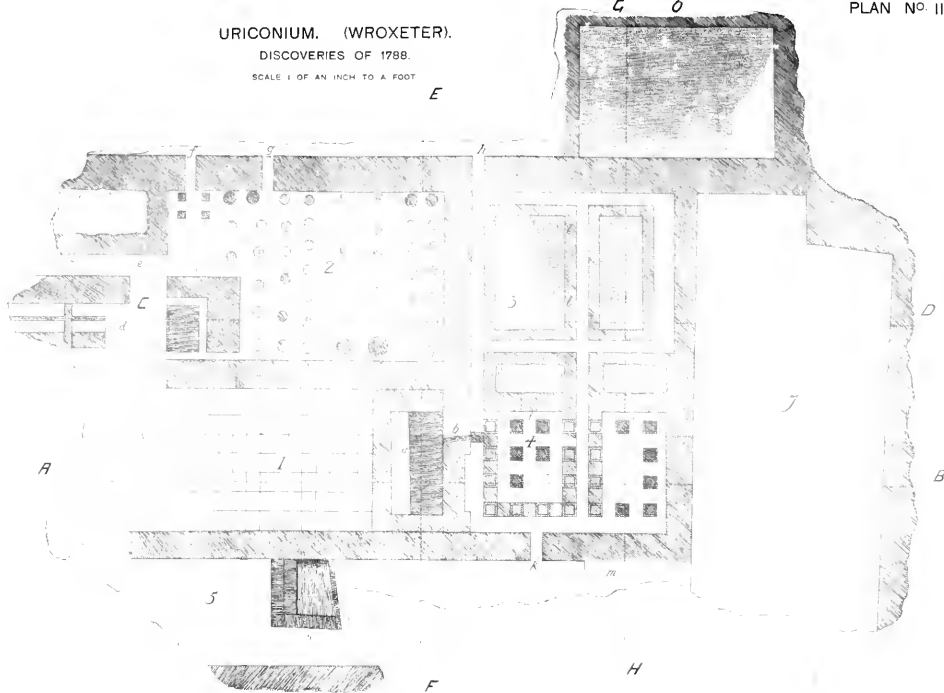


URICONIUM. (WROXETER).

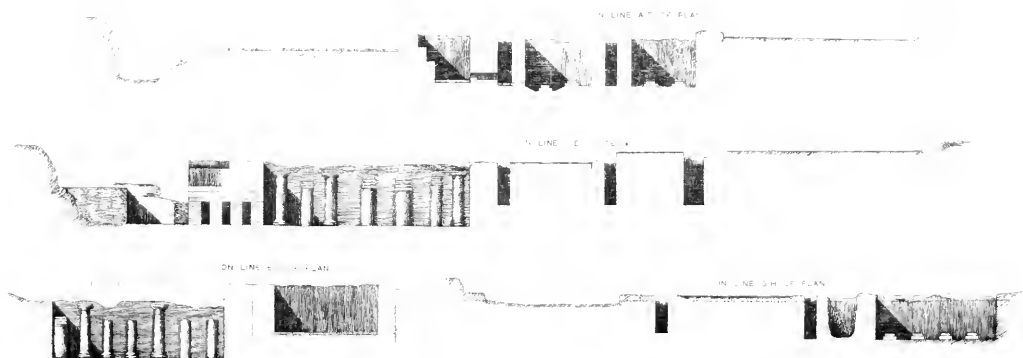
DISCOVERIES OF 1788.

SCALE 1 OF AN INCH TO A FOOT

PLAN No. II.



SECTIONS



deep below the level of the floor. It has a paved bottom ; and is formed by large granite stones on the southern and eastern sides, on the north by a large thin red stone set on edge."

To the west of chamber No. 3, and adjoining its north-west angle, the floor of another (No. 6) may be traced. It measured 14 feet by 9 feet 6 inches, and was composed of the usual coarse red tile tesserae. Abutting on the north end of the range of rooms extended a considerable area (No. 7) with a floor formed of a thin layer of mortar, upon a thick one of pounded brick."

It is evident enough that these remains formed the bathing establishment of some mansion on this spot, but one or two circumstances would suggest that the chambers had not originally been built for the purpose.

The manner in which the hot bath is built up in a corner of No. 2, and the fact that the drain from the cold bath in No. 1 runs directly into the hypocaust of the adjoining chamber and appears to empty itself there, would seem to imply that the baths were intruded into a group of winter rooms ; the hypocaust of one, if not of two, of which (Nos. 3 and 4) had been sacrificed in the rearrangement. It is to be regretted that the excavations were not carried further, and the whole house disclosed ; but as so often happens with Roman remains in this country, they were left incomplete.

In 1827, in a stackyard at H (Plan No. I), the best and most important of the mosaic pavements yet found on the site was discovered. It was destroyed by people from Shrewsbury, says Mr. Wright, who came to see it, and carried away the tesserae, not however before a sketch had been made of it.¹

It was an elaborate composition of geometrical figures, the arrangement of which will be best understood by a reference to the illustration on Pl. II. The tesserae were of two dimensions, as usual: those of the ground in which the ornamental forms were set being of large, coarse cubes of a dull blackish-green stone. The colours, beside the blackish-green, were black, white, and red, resembling in this respect the pavements previously found. This mosaic floor probably adorned one of the

¹ See Mr. Dukes' MS. volume previously cited, p. 70. No scale.

principal chambers of a considerable house lying upon the main way through the city.

A period of twenty-eight years intervened between the discovery made in 1827 and the next recorded one. In 1855 Mr. Stanier, a farmer, at that time tenant of the land which contains the principal relics of the Roman city, caused some farm buildings to be erected in a stack-yard fronting the main road through the site. (*See the point marked I, Plan No. I.*) During the work then taken in hand, a row of four bases of piers averaging 1 foot 9 inches square by 1 foot 8 inches high, and equally spaced at 12 feet from each other, was uncovered. These piers stood in a line from north to south, and at the southern end of the line a fifth base lay out of position with the rest, together with another stone. Behind this line of bases at about 80 feet to the west, at a depth of 6 feet, lay fragments of a paving of flagstones; and a concrete floor 5 feet below ground extended along the south side of these remains. Large stones, iron cramps, and lead were scattered about in different directions, evidently materials of a ruined structure.

Each base had a chase cut through its mouldings on either side, with the exception of the fifth. In this the chase was only on the north side, while the mouldings through which it was cut died away on the opposite side in a chamfered plinth, the large stone found near it being presumably a continuation of this plinth. The bases rested, in all probability, on a continuous stone foundation, a portion of which, 3 feet square, remained under one of them. When found, the four in place were each capped by a square stone, with the upper part boldly chamfered, which stones were evidently so placed at some comparatively modern period when the bases may have been utilised as they stood for farming purposes.¹

The whole of these stones were taken up and deposited in the garden of the late Mr. Stanier's house,² where they are still to be seen, with the exception of two, used as bases to the Roman columns forming the piers of the churchyard gate erected in 1859.

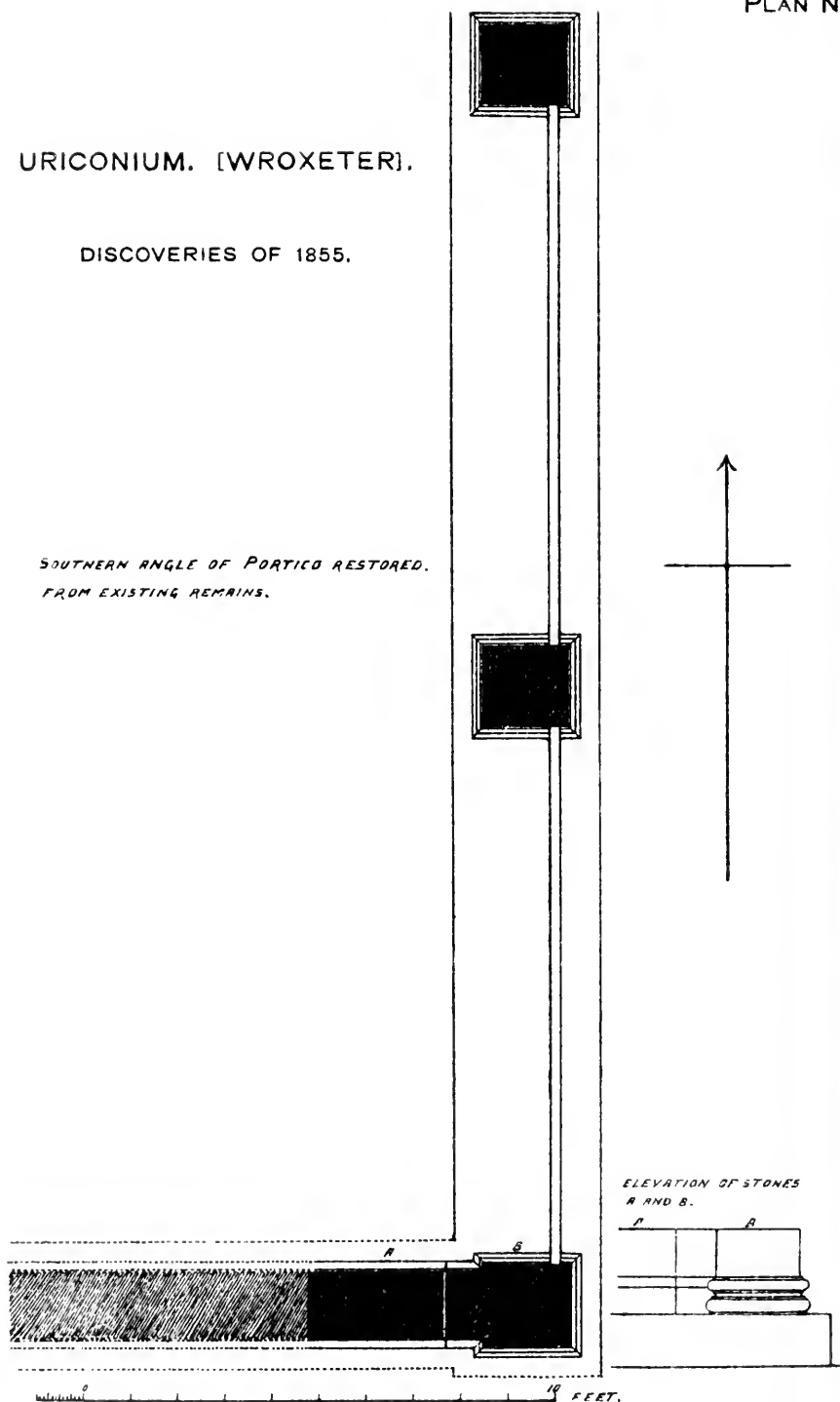
¹ *See for a plan of these remains Journal of British Archaeological Association*, Vol. XVI. p. 205, Plate 18.

² The house marked as "The Cottage" in the 25-inch Ordnance Survey Map, now the residence of Mr. Everall.

URICONIUM. [WROXETER].

DISCOVERIES OF 1855.

*SOUTHERN ANGLE OF PORTICO RESTORED.
FROM EXISTING REMAINS.*



A reference to Plan No. I at I will show the position of these remains in relation to the more important discoveries made at a later date, and in Plan No. III a partial restoration exhibits the southern end of the line of piers. These piers had constituted a part of the portico of a building looking on some street or open place. The plinth attached to the fifth base, with one stone in continuation of the same, and the chase cut through the mouldings on its northern side, as shown in Plan No. III, reveal the fact that this base stood at the end of the south wall of the edifice of which the portico was the front. The grooves in all the bases proved that the portico had been closed by screens of woodwork, a not uncommon arrangement in the porticoes of Roman buildings in this country. The paving also, uncovered at some distance behind the line of bases, showed that the building of which they were part was one of some size. (*See for section of these bases Fig. 3, Plate IV.*)

Nothing further than is here stated can be made out with respect to this structure, as the whole of the remains found were removed from their place, and the site completely covered by the modern farm buildings.

So far, the discoveries made at different times and described in this account, had, unless otherwise indicated, been purely the result of accident. Up to the year 1859 no excavation for the purpose of the most partial exploration of the site had ever been undertaken. But in that, and in the two succeeding years, work was taken in hand the result of which was to bring to light the remains of the principal public buildings of the Roman city.

These buildings formed a group occupying what was apparently the central block or *insula* of the ancient town. (*See Plan I, at D.*) The excavations carried on in this *insula* and in other parts of the city during the period 1859 to 1861 were under the superintendence of the late Mr. Thos. Wright, F.S.A., whose record of the discoveries then made is to be found in his work entitled *Uriconium*.¹

¹ The researches undertaken at Wroxeter resulted from suggestions made by Mr. Wright to the late Mr. Berial Botfield, then President of the Natural History and Antiquarian Society of Shrewsbury. A subscription

was raised, to which the latter gentleman largely contributed; and permission having been obtained from the owner of the soil, the late Duke of Cleveland, the work was begun on the 3rd of February, 1859, and continued at vari-

It is not the intention here to follow the progress of the excavations in this *insula* from point to point, but, consulting the plan (No. IV),¹ of as much of it as has been uncovered, to describe—first, its surroundings; and, second, the edifices it contained.

With respect to the former little can be said. On the north the *insula* appears to have been bounded by a street, and presumably such was the case on the east. On the south the roadway forming its southern limit was clearly to be traced. It was bordered by side walks, and on the southern side ruins of various constructions were uncovered. On the west, however, though the line of the buildings is definite enough, what lay in front of it has not been ascertained. The main roadway or street of the town coming up from the south and bordered for some distance along its course, on its eastern side by a stone gutter *k-k*, does not touch the western line of the *insula*, but, passing a group of foundations, those of a house without doubt, near the south-west angle of the *insula*, seems to enter an open space, which Wright conjectured might be the *forum* of the Roman city. If so, this same street probably started again from the northern

ous points until 1861, when, owing to failure of subscriptions, it was discontinued. In 1867, previous to the meeting of the Congress of the British Archaeological Association at Ludlow, the late Mr. Joseph Mayer, of Liverpool, gave a donation of £50 to be employed on the site. The results of the excavations then made are given in a supplementary chapter of Mr. Wright's work on *Uriconium*. When the subscriptions failed Mr. Wright appealed to the Government for aid. He says in the preface to his book, "I myself made an appeal to Sir George Cornwall Lewis, then Chancellor of the Exchequer, for assistance from the Government, but received for answer that the Treasury was not accustomed to give money for such purposes. This was not strictly true, as money had been given for excavations on the site of Carthage and in several localities in the east, which were of far less interest to our national history and antiquities than those of Uriconium," and, he continues, "almost every country in Europe furnishes examples of the readiness with which the national government comes

forward to assist with the necessary funds the exploration of an antiquarian site, though far less important in its character than that at Wroxeter."

Since the year 1867 nothing further was attempted at Wroxeter until the meeting of the Archaeological Institute took place at Shrewsbury in 1894, when a small grant made by the Council of the Institute was expended in partial excavations for clearing up one or two doubtful points in the construction of the Baths, other points also being examined in 1896 by means of the same grant. It should be mentioned that the Natural History and Antiquarian Society of Shrewsbury still hold the portion of the site containing the remains of the Baths by the payment of a rent to the owner of the soil, such portion being kept open for public inspection.

¹ This plan is taken from one in the possession of the Archaeological Institute made by Mr. Hiliary Davies in 1861, but with additions and corrections resulting from later excavations, &c. &c.

end of the *forum*, and in this street on its western side occurred the building, the portico of which was found in 1855.¹ The question whether this space be the *forum* or no is one which excavations alone can solve, and those only on a large scale.

Turning now to the *insula* itself, it will be well to note the order and character of the buildings it contains. Along its northern side lay the *basilica*, with an annexe to its eastern end, and beyond again, at the north-east corner, an open area. Neither the annexe nor this space have, as yet, been thoroughly explored.

At the eastern end of the *basilica* on the south side was a large hall, originally vaulted, communicating with the *basilica* by a wide doorway, with two, if not four, chambers, also vaulted, to the left and right of it. Possibly this hall was originally the *curia*, the council chamber of the governing body of the city, with other chambers attached to it, serving as the treasury, the record office, &c., &c., the whole group at a later period being converted to other uses, as will be explained later on.

The western face of the *insula*, that fronting the supposed *forum*, beginning from the north, showed, first, the façade of the *basilica* with its two entrance doorways; next, two shops, at the back of which were situated the latrines serving the *basilica* and the public baths; then a wide corridor, the main entrance to these baths; and, last, a paved court with a row of cells on three sides, and a corridor lining the southern range. Behind the line of buildings just mentioned the rest of the *insula* was filled by the remains of the public baths of the city, of which unfortunately scarcely more than half have as yet been uncovered.

Proceeding now to an examination in detail of the buildings whose various positions have been thus briefly sketched, the largest and most important must first claim our attention.

This was the *basilica* which, lying in a direction east and west, occupied nearly the whole width of the upper part of the *insula*. (Plan IV, A, A.)

¹ Wright supposes the *forum* to extend as far north, or even further than this portico, which he considers may have been situated on the western side

of its area; but the proportions for the area which such measurements would give are quite inadmissible.

It consisted of a great quadrangular hall, 229 feet long by 67 feet wide, with walls from 3 feet 4 inches to 3 feet 6 inches in thickness. The huge fragment of these walls remaining above ground referred to previously in this paper (p. 129), and known as the *Old Wall* or *Old Work of Wroxeter* (see D, Plan I, and 1-1, Plan IV), formed a part of the south wall of the *basilica* at its eastern end. It shows in its faces and fractured ends the usual methods of Roman construction, viz., the core of rough stone and mortar, and the faces of small carefully-squared stones laid in regular courses, with bonding courses of bricks at intervals. The foundations of these walls were found to have been laid at a uniform depth of 7 feet below the floor of the building.¹

The façade of the *basilica*, at its western end, as already mentioned, contained the principal entrance—two doorways set close together, and giving access to the central portion of the building (2-2). From pieces of the stonework found it may be inferred that they had some architectural pretensions. In the centre of the northern wall a considerable break probably marked the place of a doorway there also (3). In the southern wall were two entrances (4-5) to the peristyle of the Baths, each with a large step; and near the eastern end of the same wall a large breach in the mass of masonry named “the Old Wall,” indicated a doorway of some importance (6), the means of access to the large vaulted hall already spoken of, of which more presently. Finally, an entrance with a step in front of it (7) afforded a means of communication between the *basilica* and the long annexe east of it.

The interior of the *basilica* was divided into a central nave 30 feet wide (A-A) with an aisle on either side of it, each aisle being 14 feet in width. These aisles (B, C) were parted from the nave either by colonnades or by arcades. The foundation walls, 4 feet to 4 feet 6 inches wide (8-8), on which the colonnades or arcades rested, were discovered during the excavations, but wherever found appeared very ruinous. Probably the course of large flat stones, at the floor level, forming a continuous bed on which the columns were erected, offered too

¹ *Uriconium*, p. 189.

tempting a prize to early seekers for building materials to be left intact.

In the plan it will be seen that these foundations, or sleeper walls, run from end to end of the great hall; but it may be conjectured, if further investigation were permitted, that sleeper walls would be found crossing each end, and that thus, the colonnades based on them, would have made a continuous aisle all round. Supposing such were the case, the *basilica* of Uriconium would then have strongly resembled in plan that of Pompeii, though with a longer and narrower central nave. It may also be considered that, as part of the scheme of arrangement, the aisle at the east end was used, like that in the Pompeiian example, as a law court, with its usual tribune.¹

Like many other Roman buildings, the *basilica* seems to have been very carelessly laid out.

The northern aisle (B) is wider by 2 feet at its eastern than at its western end, and the eastern wall of the edifice is more than 6 feet out of square. There must, however, in the latter case have been a rebuilding; and, what at first sight might appear the effect of carelessness in the setting out, may have been done with some intention still unknown to us, but which may be guessed.

Thus far, judging from the plan, it may be taken for granted that the *basilica* consisted of a very long hall divided into a nave, with an aisle on each side of it. But what was the nature of the division between nave and aisles, whether columns carrying an entablature or piers joined by arches, has yet to be discussed.

Looking to the usual basilican arrangement, it might be inferred that the sleeper walls supported a colonnade, but where are the columns? Some fragments of them may still be buried beneath the four or five feet of earth covering the floor of the building, and, as will be seen presently, portions of shafts are to be found on the site which might have belonged to such a colonnade; but all, with the exception of the few fragments named hereafter, have been either carried away or broken up in the lapse of the thirteen centuries or more since the destruction of the city.

¹ J. Overbeck, *Pompeii*, 143.

It should always be remembered that as soon as land comes under the plough, every effort is made to clear and render the surface even, and to remove such obstacles as broken drums of columns, and fallen walls. The value also of stone, already quarried and dressed, for use as building material, or which, as regards the larger fragments, could be re-worked for the fabrics of the churches and monastic houses rising near the site in the early middle ages, must not be overlooked when the scarcity of the architectural remains of the Roman city are considered. After so many centuries of ruin, neglect, and active destruction, it is perhaps rather a matter for wonder not that so little is left, but that anything has been preserved.

Still, we may take it as more than probable that the *basilica* possessed colonnades, and such evidence of their existence as can be adduced will now be brought forward.

The width of the sleeper walls (S) would permit of columns being erected upon them measuring 3 feet in diameter, and an examination of the site will show that portions of drums of columns approaching or equalling these dimensions are to be found amongst the ruins, and elsewhere. In the southernmost of the two shops, Z, is part of a shaft 5 feet 6 inches long by 2 feet $8\frac{1}{4}$ inches in diameter. Another section, lying in the court south of the shops, has a diameter of 2 feet 7 inches. In the Museum at Shrewsbury can be seen another fragment 3 feet in diameter, brought from Wroxeter.

But a far more interesting relic is the font in the parish church of Wroxeter, formed in all likelihood from a much reworked Roman base, with a portion of shaft attached to it.

The members of this base appear to have consisted of the usual roll or torus mouldings, with a small flat hollow between them, the upper torus being united with the shaft by a long and large cyma reversa moulding. What remained of the shaft showed a diameter of 3 feet.

The church of Wroxeter dates from Saxon times, and it may well be that this font carved out of a Roman base is of the Saxon period. The method by which it was made is easily understood. When the big mass of stone came under the hands of the Saxon carver both the roll mould-

ings must have been much battered, and the lower one probably badly broken (as is often the case with Roman bases), whilst the fillet between the large hollow moulding and the upper torus was completely worn down. The carver, therefore, proceeded in this manner: he turned the base upside down, worked the upper roll moulding into two, boldly struck off what remained of the lower, making a flat sloping face instead, and carved four concentric rings round the basin, which he hollowed out of the bed of the base, and thus formed the font out of the reversed Roman base, which stands in the church to this day.

The accompanying section will explain the way in



SECTION OF FONT, WROXETER CHURCH.

$\frac{1}{16}$ LINEAR.

which this base has been converted into a font, the dotted lines showing the Roman mouldings as conjectured.

Now, if all the fragments just named be taken to be portions of columns from the *basilica*, as from their size would seem most probable, this base, with the frustrum of shaft attached, is of especial interest; for from the diameter of the shaft where it joins the mouldings, the height of the column to which it belonged can be obtained within certain limits. The measurement given by this diameter would indicate a column some 27 feet in height if the column was of the Corinthian order, and it may be asserted that a column or columns of such a height and diameter as indicated by the fragments cited could only have come

from what was doubtless the largest building in the city, *i.e.*, the *basilica*, such an edifice, in fact, as that near which they were dug up.

The opinion that the Corinthian was the order to which these columns belonged seems to be confirmed by the fact that a mass of stone carved with acanthus leaves, from the ruins, now in the museum at Shrewsbury, and clearly a portion of a large Corinthian capital, would, if perfect, accord with the dimensions of the pieces of shafting just described. (*See* Plate I, Fig. 2.) Thus it will be seen the dimensions of a complete column of the Corinthian order can be deduced from these fragments. Taking it, therefore, as a fair conjecture that the order and measurements of the columns of the *basilica* have been obtained from actual fragments, the next point to be ascertained is the spacing of these columns which formed the colonnades.

During the course of excavation in 1859, the floor of the eastern half of the north aisle of the great building was uncovered (B, Plan IV). It had been laid with a coarse mosaic of different geometric diapers in quadrangular panels varying slightly in width, but with an average of 8 feet 6 inches. What is of importance to note here is, that the width of the panels is strongly suggestive of the idea that when the mosaic was planned and laid down, the dividing lines of these panels were made to coincide with some already existing structural feature of the building, and that that feature could only have been the columns of the colonnade between this aisle and the nave. Thus the dividing lines between the panels would accord, as far as the exigencies of each pattern allowed, with the centres of the columns.¹ We may therefore find in the width of these panels a guide to the spacing of the columns of the colonnades, and shall be thus enabled to calculate the distance between centre and centre of each at 8 feet 6 inches, which is the average width of the panels.²

¹ See for arrangement of panelling, 9-9, Plan IV, and supposed positions of the columns of the colonnade, 10-10. For the sake of clearness the patterns filling the panels are omitted in the plan.

A very full account of all the mosaic pavements found in the excavations at Wroxeter in 1859-60 is given by Mr.

George Maw, F.S.A., in the *Journal of the British Archaeological Association*, Vol. XVII, 1861. Plate 9 of this volume gives an admirable restoration by him of the portion found of the pavement of the north aisle of the *basilica*.

² An example of the treatment of floor mosaics to accord with the archi-

FIG. 1

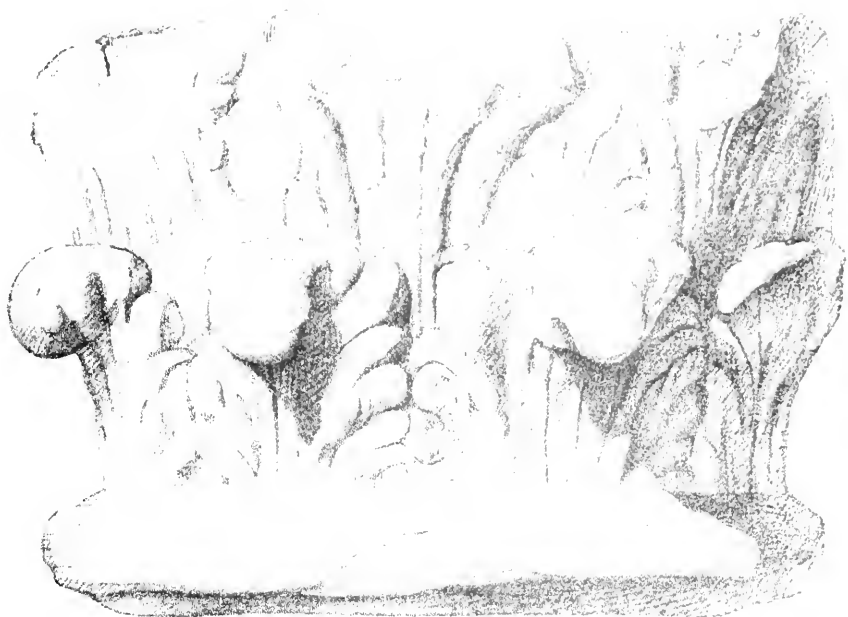
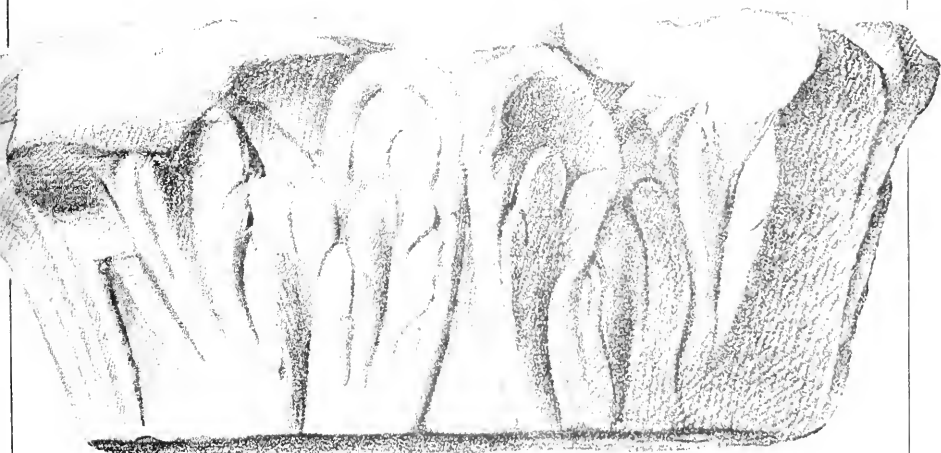


FIG. 2



C. J. Fox del. 1890.

WROXETER. ROMAN ARCHITECTURAL REMAINS.

($\frac{1}{6}$ actual size).

Nor is this all that the mosaic floor may be made to tell. A break (3) in the north wall near the centre of its length was spoken of when mention was made of the doorways of the building. It happens that one of the panels close to this spot is wider than the others by a foot, thus making a wider intercolumniation, and possibly indicating an important entrance.

Again, the last panel of the range at the east end is larger than the others, being nearly square instead of oblong, and the next west of it has borders which cross the green enclosing bands. This arrangement suggests that the two panels, taken together, show the width of an eastern aisle, if it be supposed that the aisles were returned across each end of the *basilica*, as is the case in that of Pompeii.¹

Traces of a mosaic pavement, presumably similar to that of the north, were discovered in the south aisle, but the nave of the building seems to have been paved with small tiles set in herring-bone fashion, *opus spicatum*. A patch of this paving was uncovered near the eastern end, and, as but little of the flooring was seen, it is not impossible that this *opus spicatum* may have only formed a ground for compartments of tessellated work.

The width of 8 feet 6 inches from centre to centre of the columns, possibly indicated by the remains of the panelled floor of the north aisle, would only give an intercolumniation of about two diameters. From its narrowness it may be concluded that the entablatures, supported by the colonnades, were of stone, though no remains of them have been observed. Like the columns, they have been carried away, but some fragments might possibly still lie in the earth covering the floor of the *basilica*.

tectural divisions of a structure has been found elsewhere, as in the following instance. A plan preserved in the Cirencester Museum shows a portion of a peristyle of some Roman building discovered in the year 1864 in the garden of Mr. Daniel Smith, at Watermoor, Cirencester. The mosaics with which the floor of this peristyle was adorned were divided into panels, which accorded with the width of the space between the columns—10 feet. Each panel, however, was parted from the other by an interval equal to the diameter of a column, and, in con-

sequence, the disposition was not so crowded a one as in the floor treated of above. The portion excavated of the peristyle in question had a length of 38 feet, and was certainly longer; but as the building of which it was a part continued into a neighbouring property, it could not be traced further.

¹ The divisions of the mosaic floor of the north aisle of the *basilica* have been laid down on Plan No. IV from the illustration of this floor in Mr. George Maw's paper already referred to, and the columns are indicated conjecturally to accord with these divisions.

Thus, from the preceding description of the ground plan and from the facts derived from existing detail, the inference may be drawn that the *basilica* of Uriconium was a building consisting of a nave with aisles on each side parted from the nave by colonnades, the columns of which were of the Corinthian order, 27 feet perhaps in height, 3 feet in diameter, with an intercolumniation of $1\frac{5}{6}$ diameters, and that they carried a stone entablature. Above this, it may further be conjectured, walls rose to a height sufficient to permit of windows forming a clerestory, and at some 60 feet from the floor a wooden roof covered the nave, which may or may not have had a panelled ceiling. The aisles were also roofed. The covering of all these roofs was either formed of the hexagonal stone slabs so common on Roman sites or of the well known Roman tiles. The floors of the aisles were paved with tessellated work in panels of geometric diapers, and the nave with *opus spicatum*, and finally the plastered walls were covered with decorative colouring, many traces of which were found in the excavations.

All that is positively known at present concerning this chief building of the Roman town is here summed up, but it is quite within the range of possibility that more might be learned, not only about the superstructure, but also concerning the plan, by a careful uncovering of the area contained within its walls. In February, 1859, the exploration was begun, but owing to some misunderstanding was soon interrupted and finally abandoned, and so the work was left in a very incomplete state.¹

Leaving the *basilica*, the next point to which attention must be directed is the hall D with the two chambers E and F to right and left of it, those marked G and I, and a second hall H, south of and adjoining D, which seem to form a group complete in itself, to which other buildings have been added.

Of these six chambers the central one, D, is by far the most important, if only for the reason that it is the only

¹ *Uriconium*, p. 114. The internal disposition of the great edifice just treated of, as described by Wright in this work, is quite inadmissible if judged by any comparison with similar remains of the Roman period either in this country or elsewhere; and this

writer's evident want of acquaintance with Roman architectural remains, or with the principles of Roman construction or planning, has led him into errors and omissions of important details in his explanations of the other buildings on the site.

Roman building of any size in this country in which the remains of vaulting are to be seen. It was 49 feet long by 33 feet wide, its length ranging with the *basilica*, which it adjoins—that is, from east to west. Its northern wall, which is the huge fragment of the southern wall of the *basilica* at its eastern end, called the *Old Wall*, bears on its face traces of the vaulting spoken of in the shape of three arches—the central one, the largest in span, being segmental, and those on each side of it semi-circular, though the crown of each arch is at the same height from the floor of the hall.

It was imagined by Wright¹ that these indications of vaulting showed that three parallel chambers with barrel vaults, running north and south, existed here, instead of a single spacious one, but nothing was done under his direction apparently to ascertain the correctness of this view. Excavations made in September, 1896, however,² have proved that the area D was one large chamber, and by the same excavations it was also shown that in the great breach, in the “Old Wall,” beneath the central arch of the vaulting a doorway formerly existed of considerable pretensions, leading from the *basilica* into this vaulted hall. Of this there could be no doubt, for on digging out the earth from the whole space of the opening (6), traces of a mortar face could be seen on each side against which the large stone jambs of the doorway, perhaps monoliths, had been set. The bed of the sill also was uncovered, the holes in the wall at the foot of each jamb showing that it must have been made of stones having a thickness of 15 or 18 inches. The stones of both sill and jambs had been torn out and carried away.³

At the same time that this breach was examined (in 1896), the digging was carried further on each side—inside—and revealed the remains of two square piers (11–11), each about a foot from the broken edge of the doorway. Very little remained of the western, but the eastern one was standing to a height of 4 feet 6 inches.

¹ *Uriconium*, p. 120.

² By Mr. Herbert Jones, F.S.A., and by the writer of this paper.

³ The excavations of 1859 were begun in the south aisle of the *basilica* near this breach, and a capital, which may

have been of the Doric order, was then dug up. It is possible that it was part of the adornment of this entrance, but as unfortunately all details are lacking, nothing further is known respecting it. See *Uriconium*, p. 110.

It was bonded into the wall to that height, but there seemed no traces of bonding any higher. Possibly this die of masonry may have served, with its companion, as a pedestal to solid stone pilasters supporting the springing of the vaulting, which was in line with them above. It was perfectly clear that those masses of masonry, which were each 3 feet on face and something over 3 feet in projection from the wall to which they were attached, could not be the offsets of walls dividing the hall D into three parallel compartments, for on the southern face and on the sides of the more perfect one pieces of finished wall plastering of pink cement were distinctly to be seen.

The problem remains to be solved with what kind of vaulting this hall was covered. In 1894, shortly before the visit of the Archæological Institute to Shrewsbury, a search was made in the much-encumbered area,¹ (which, with that of chambers E and F, has never been properly dug out); but although two trenches were carried from the south wall in line with the piers uncovered last year, for more than half the distance across the hall, only the western trench showed any trace of such supports as must have existed to carry the vaulting. There were, however, in this trench some indications of what might have been the footings of a pier, but the spot required more examination than could be given to it at the time. Incomplete though this examination was, it led to the conclusion that supports, probably in the shape of square or oblong piers, had existed at central points between the south wall and each of the piers to right and left of the great doorway, and that the hall had been covered by an intersecting vault in six compartments.

From fragments of the vaulting dug up in 1894, it would seem to have been constructed partly with box, partly with flanged, tiles, the latter, with their flanges upwards, lining the rubble concrete like a skin and forming a surface on their under sides for the plastering of the vaults.² The box tiles are 11 inches by $8\frac{3}{4}$ inches, and 6 inches thick; the flanged tiles are 6 inches by

¹ By Mr. Herbert Jones, by means of a small grant from the Council of the Archæological Institute.

² The materials and method of construction here described are very similar to those employed in the Baths of Caracalla at Rome.

7 inches. The rubble concrete of the vaults had probably a considerable quantity of tufa in it, as fragments of this material are to be found on the site.

The southern wall of the hall, which remains to a height of over 5 feet, has a foundation course of stones of considerable size. At each end is a doorway or opening into the chamber H to the south of the hall, and two breaches in the wall, one close to each doorway. It is most likely that the windows of the hall were pierced in this wall, that they were semi-circular, following the line of the vaulting in shape, and, probably, three in number. This seems the only possible arrangement, as, on the other sides of the hall, the height of the surrounding buildings would have prevented any openings for light being made. The windows in question would have opened above the roof of chamber H, and that chamber, in consequence, must have been a comparatively low one. Its original floor, however, from the slope of the ground was at a lower level than that of the hall D.

The floor of this hall (D), as far as it could be examined in 1894 and 1896, showed many traces of repair. Originally it appeared to have been laid with tesserae, for in the corner behind the western pier beside the great doorway (11) a very small fragment of the tessellation remained, consisting of some few cubes of cream-coloured stone with others of a larger size of the dull green kind so frequently used as a ground or bordering in the mosaics on this site. Lining the foot of the pier at the same spot could be traced the quarter-round plaster moulding, which is the usual edging of floors in Roman buildings in this country.

Another detail also merits notice. Against the southern wall, at about 6 feet from the eastern doorway, was a stone foundation (12) running at right angles to the wall, and showing a returning angle at 5 feet from it. A row of tiles lay close along the wall, the last one being partly laid in a chase of the stonework. Whatever the construction had been of which these faint traces formed part, it had evidently been destroyed at some period and floored over with *opus signinum*. If the hall D had originally been the *curia* of the governing body of the city, the foundations in question might possibly be those of some platform or tribune facing the principal entrance.

Little can be said respecting the other chambers which composed this group.

The chamber H, into which opened the wide doorways from the hall D, has lost its southern wall, which may have been on the line 13-13, where a foundation seems to have existed. The chambers E and G, from the thickness of their side walls, had no doubt barrel vaults. There is a break in the northern wall of G, perhaps a doorway from the *basilica*, but more probably the doorway was in the wall between it and the hall D. One of the corresponding chambers to the two named, F, appears to have been rebuilt. That marked (I) may retain its original plan in the foundation of its western and southern wall, though the eastern one may also be a rebuilding.

It may be well to consider here the reasons for separating the group of chambers just described from the rest of the buildings with which, as may be seen on Plan IV, they are so closely connected.

In the only *basilica* of a Roman town in this country as yet thoroughly examined, that at Silchester (*Calleva Atrebatum*), one whole side of the structure is lined by a series of chambers, having in the centre of its length a large apsidal hall, opening upon one aisle of the *basilica*. There can be little doubt that in this range, with its central hall, may be seen the offices and council chamber of the governing body of the city. It would be natural to expect something of the same arrangement, or at least a modification of it, attached to the *basilica* of Uriconium. At first sight, however, this does not appear to be the case. A street runs along the whole length of its northern, and the public baths adjoin its southern, side. Yet if similar public offices to those lining the north side of the *basilica* of *Calleva* be looked for in the *basilica* of *Uriconium*, they may perhaps be found in this group of chambers, in which the hall D would represent the *curia*, and E, F, G, H, I subordinate offices. An examination of Plan IV will show that this group detaches itself from the adjoining constructions by the thickness of its walls (probably from the fact that five out of six of its chambers were vaulted); and the main division D, on account of the wide entrance from the *basilica*, appears to appertain more to that edifice than to the buildings south of it.

Again, the chambers E and G, if not F and I, as noted, may be taken to have been vaulted. When discovered they clearly constituted part of the Baths, though only subordinate parts, and it seems strange that they, rather than the main chambers of that establishment, the *caldaria*, should have been roofed in this way, which is a method more likely to have been adopted for these latter. The fact might imply that the compartments E and G, if not F and I, had been incorporated in subsequent constructions, and diverted from their original use.

The evidence may be somewhat scanty; but if the theory put forward be accepted respecting the chambers named, it may possibly help to elucidate the puzzling arrangement of the eastern end of the *basilica*.

It may be taken for granted that the civil *basilicas* of the Roman towns contained a court for the administration of the law, with its tribune, usually at one end of the building, but sometimes, as at Calvea, at both ends. In the most notable example remaining of such a basilica, viz., that of Pompeii, the tribune for the presiding magistrate is situated in the aisle at the end of the building furthest from the main entrance, which is at the opposite end.¹ This same arrangement possibly prevailed in the *basilica* of *Uriconium*.

It may be, that when the citizens determined to erect the fine Public Baths whose ruins still remain but partially revealed, the *curia*, with the adjacent offices, were given up to form part of the new establishment, and at the same time the eastern end of the *basilica* was remodelled, the long hall K being added to it, in order that the law court might be removed from its old position near the entrance to the *curia*, now the main way to the Baths. By this means, the noise and interruption to business in the court by the change of the *curia* to other uses would be obviated. Very possibly the public offices were transferred to some position in the *forum*, and thus the strange arrangement of the eastern end of the *basilica* can be explained.

Whatever alterations may have taken place—and alterations there have certainly been—in the buildings near its eastern end, they ultimately became part of the

¹ J. Overbeck, *Pompeji*, 143.

Public Baths of the city, to which attention must now be directed.

It should be premised that, owing to the incomplete state of the excavations, only half of the constructions of this interesting establishment is to be seen. It is probable that the body of chambers on the west of the great central division was repeated, with modifications perhaps, on the east of it. The entire mass of buildings stood within an open courtyard presumably surrounded by ambulatories, except at one point, where the ambulatory on the north side was interrupted by the compartments E, D, and F. The courtyard, with its ambulatories L, L, L, took up the width of the *insula* all but a space on the west side 63 feet wide by 176 feet long, filled with other structures, to be treated of presently. On the north it was bounded by the *basilica*, the end of the long hall K, and the limit, whatever that may have been, of the space at the north-east corner of the *insula*. On the south its southern ambulatory lined the street which bounded the *insula* in that direction.

The northern and southern ambulatories had a width of 12 feet, the one on the west being wider by 2 feet than the others. The foundations next the courtyard, 3 feet in width, are doubtless the remains of a sleeper wall, the base on which stood the columns supporting the roof of these ambulatories. Apparently no attempt was made, in 1860 or later, to ascertain if these foundations showed any signs of the positions of the columns. A shaft is said to have been discovered lying across the stairway to the hypocausts at 17,¹ which may have been a portion of one of these columns; but unfortunately the mere fact of its discovery is all that is known respecting it. At the present time (1896) portions of shafts showing a diameter of 1 foot 6 inches are to be seen at Wroxeter,² which may have been removed from the site of the baths and may be fragments of the columns of the ambulatories.

Nothing is recorded as to the flooring of the ambulatories, but the area of the courtyard appears to have had a flooring of cement. At the south-west corner considerable traces were discovered of a reservoir, 4 feet deep, paved

¹ *Uriconium*, p. 116.

² At the churchyard gate and in the

gardens of Mr. Everall's and Mr. West's residences at Wroxeter.

with flag-stones (14). How this was supplied with water was not ascertained.

The buildings of the baths situated within the great courtyard, with its ambulatories, comprised one considerable body of constructions lying from north to south across the courtyard, with a western wing, and, presumably, a similar eastern one, which is still unexcavated.

Beginning from the north, the first section of the main division or body of constructions to be noted is the hall D. This, changed from its original purpose and afterwards used probably as the *Apodyterium* of the baths, has been already treated of in detail, but something more must be said concerning the chambers E and F. Neither of these were warmed by hypocausts, and F had a bath 10 feet 6 inches long by 6 feet wide sunk in the floor at the southern end. This bath was floored with small cream-coloured tesserae in very perfect condition when uncovered. On the southern wall above it traces of a braidwork border in mosaic showed that the walls of the chamber had been adorned with tessellated work up to a certain height, at least in the vicinity of the bath. A similar adornment on the corresponding wall of chamber E seems to have been found, but the earth was not dug out to a sufficient depth at that spot to ascertain whether a bath existed there also. If it did, then these two chambers may be taken to be *frigidaria*, one attached to the western, the other to the eastern, wing of the establishment.

Passing from the hall D, which may be designated the *Apodyterium*, into the long apartment H, signs of various alterations are to be noticed. The floor of the hall D was between four and five feet higher than that of H, and a retaining wall or foundation ran at the foot of its southern wall along the north side of chamber H. This retaining wall has been removed for some distance in the centre of its length, and in the space thus obtained a substantial dwarf wall of brick was built up to form, it would seem, a narrow enclosure at least 15 feet long by 6 feet wide, which might have been intended as a cold bath. The western end of this brick wall remains, and a conduit 1 foot wide runs in at the north-west corner, at 15. The conduit passes under the floor of the hall D in a northerly direction, as indicated on Plan IV.

Steps must have led down into chamber H from the doorways in its northern wall. Either a much-worn fragment of one such step, or a portion of the sill of one of the doorways, is lying in the south-east corner of the hall D, and a piece of another at this spot looks as if it had been worked up as a footing in the wall at this corner when, as seems likely, the west wall of chamber I was rebuilt.¹

In the condition of things just described, chamber H may have been the original *frigidarium* of the baths, especially if the enclosure formed by the dwarf brick wall be taken to indicate the presence of a cold bath. Very material changes, however, must have been afterwards made in this chamber, as will be seen, for the pillars of a hypocaust were raised on the floor and the suspended floor constructed at a height equal to that of the hall D. The *suspensure* of this hypocaust received a paving of mosaic, a fragment of which may still be seen at the foot of the wall near the eastern doorway, showing that the bath, if bath it was, had been completely covered over and obliterated by the later alterations.² Nor was this the only change made in the chamber H. The trace of its supposed southern wall at 13-13 had, south of it again, lines of *pilæ* of another hypocaust, showing either an extension of H, or a second and similar chamber M, to the south of it. Where the south wall of this second apartment was placed it is impossible to say, perhaps somewhere just below the letter M in the plan; but the whole of the ground in this part of the site is heaped with earth dug out from the uncovered west wing: thus examination is rendered at present impossible, and all is left in uncertainty respecting the internal arrangements of the lower half of the main body of the baths.

If, however, a conjecture might be ventured upon concerning the arrangement of the divisions marked M and H on Plan IV, it would be as follows: Instead of two parallel chambers, the whole space from H to M probably formed one great hall, the roof of which may have been supported by a row of columns standing upon the

¹ A good illustration of these remains is to be seen in Plate 17, Vol. XV, of the *Journal of the Brit. Archaeol. Assoc.*

² A trace of this floor is shown on Plan IV, just above the letter H. Even this floor was covered at a later time by a layer of *opus signinum*.

original south wall of H, pulled down to the level of the raised floor of the newly-constructed hypocaust for the purpose of forming a base for such supports. The disposition of the space thus shadowed forth would have afforded a very fine hall divided across the centre by a row of columns and warmed by an extensive hypocaust. It would have constituted a *tepidarium* worthy of the establishment of which it would have been the central chamber.

The third and southernmost section of the central division of the baths has, in part, been outlined. The walls, east and west, were continuations of the walls of the *tepidarium* just mentioned, with a considerable rectangular projection in the middle of one, if not of both, sides. The south wall had two entrances in it, and a space of 11 feet occurs between it and the southern ambulatory of the courtyard.

The exact position of the northern wall is uncertain. Trenches cut in the areas enclosed by these walls showed a floor of large tiles 12 inches by 18 inches, and a space paved with them was uncovered which was 10 feet wide by 30 feet long. This floor (16) was found to be sunk 3 feet (perhaps more) below the level of other cemented portions of the area, and it was surmised that the tiling formed part of the bottom of a swimming bath.¹

Looking to the nature of these remains it is possible to imagine that the centre of the space N was filled by a large swimming bath surrounded by an ambulatory, the roof of which was supported on columns. The two covered recesses, O-O, of which the walls of one remain, opened on this ambulatory and were for the accommodation of bathers. They doubtless contained seats, and niches in the back walls, in which the clothes of the bathers could be deposited. There would, of course, be one or more doorways in the north wall of this swimming bath communicating with the *tepidarium*. Such was probably the method adopted for laying out this space, although, as in division M, all is conjectural until, by some fortunate chance, the most interesting part of these baths shall be properly examined.

If the disposition of this central portion of the baths

¹ *Uriconium*, p. 122.

remains conjectural, the same is happily not the case with that of the western wing. Here all, with slight exceptions, is clear enough.

Returning to the *tepidarium* H, the two next chambers claiming notice are the two *sudatoria* G and I. These are alike in plan, though the latter (I) is of somewhat smaller dimensions than the former, being 11 feet by 26 feet, as against 13 feet by 25 feet. In both, the walls were jacketted with flue tiles, the imprints of which in the mortar holding them to the masonry can still be seen on the north wall of I.¹ The furnace opening of the hypocaust of this chamber is in the south-east corner; chamber G received its heat, it may be conjectured, from the caldarium R by an arch in the party wall now obliterated by the destruction of the southern half of that wall. In the north-east and north-west corners respectively of these *sudatoria*, and opening upon them by wide doorways, are two small cells, P and Q, floored with *opus spicatum*. They were evidently intended as repositories for the different articles required for use in the baths.

Next to the sudatorium G was the caldarium R, entered from the former by a doorway in the wall dividing the two chambers. The arrangement of the hypocaust under the caldarium R, and of that of the chamber next to it, S, is of some interest, as from it may be learned the disposition of such hypocausts as were in continual use in public buildings, and therefore requiring more frequent cleaning and inspection than those of private houses. Adjoining the north wall of chamber R was a small enclosure (17) containing a stair of three steps leading down to a low doorway in the wall with relieving arches over it. It was originally closed by a door, and it led into the hypocaust under the chamber just mentioned. From this door, in a southerly direction, a broad passage way pierced the mass of *pilæ* as far as a point just beneath the centre of the chamber above (R), and then, turning at a right angle, continued westward, through an opening in the partition wall between R and S, and crossed this latter chamber (S) to end at the furnace

¹ A view of this wall, taken soon after it was uncovered, is given in Plate 17, Vol. XV, of the *Journal of the Brit. Archæol. Assoc.*

which heated it. The floors of all the hypocausts to be found in the ruins of the baths appear to have been at the same level, and the *pila* of the same height throughout—something over 3 feet. This passage, therefore, among the pillars of the hypocausts of the two chambers, the *caldaria* R and S, was of a sufficient height, as well as width, to allow room for the work of cleaning and repairing. It was of use also in creating a strong draught in the furnace of the *caldarium* S, and thus causing a general diffusion of heat beneath the floors of the two chambers in question.

It cannot be ascertained whether the walls of either *caldarium* were jacketted with flue tiles, like those of the *sudatoria* G and I; but the probability is, that this method of heating was adopted for chambers R and S as well as for G and I.

The stokehole of the furnace of the *caldarium* R was at 18. On this side of the western wing of the baths the courtyard was on a level, or nearly so, with the floor of the hypocausts, so that one step only descends to the stokehole at 18, whilst it may be remembered that a short flight of these steps at 17 descended to the same level on the north. The space 19 between the stokehole and the south wall of the *caldarium* R was probably the furnace, with the boilers and water tanks above it for the supply of the hot baths, whose place is marked by the figures 20-20. The heat from the furnace 19 passed into the hypocaust of the chamber R through the aperture in the south wall, opposite to the furnace opening in the stokehole 18. A projection of stonework close beside the opening in the south wall, together with the pillars of the hypocaust, supported the floor of the baths mentioned, and these baths probably took up the entire width of the chamber and had a breadth of not less than 6 feet.¹

The next and larger of the two *caldaria* (S), which form the wing of the baths under description, was some-

¹ Another theory may be broached with respect to the space 19. Supposing that no baths existed at 20-20, it is possible that 19 may have been a small chamber lying directly over the furnace here, and communicating with the

chamber R by a narrow doorway. In this way it would have served as a *laconicum*, a chamber of the baths in which the heat could be raised to the highest pitch attainable by Roman methods.

what irregular in shape. Omitting its various adjuncts it was a square of 24 feet. On the south a recess 12 feet wide by 6 feet deep was probably intended to hold a seat ; on the north a second one, semicircular in form, with a diameter of 12 feet, no doubt contained the *labrum*, a basin of stone or marble, filled with cold water for the use of bathers ; and on the west side a third, and largest of all, taking up, in fact, nearly the whole width of the chamber, held, there is little reason to doubt, a large hot bath. The width of this recess was nearly 16 feet ; but its depth could not be ascertained, as all trace of the back wall has disappeared. This wall must, however, have stood on the line of the opening of the furnace of the hypocaust at 21, the opening of the furnace being pierced at the base of the wall.

The furnace itself, of which the opening was in the stokehole T, consisted of two parallel walls with a width between them of 2 feet. They were 12 feet in length, and lay directly under the floor of the bath, which they helped to support. The stokehole T appears to have contained the tanks for the supply of the adjacent bath. The bases supporting them were to be seen on either side of the mouth of the furnace.

All traces of the baths themselves, other than a few remains of the supports of their floors, have vanished, and the suspensuræ of the hypocausts, of every chamber also, with trifling exceptions. But there can be no doubt that the *caldarium* S contained a bath, and that in all probability the *caldarium* R was furnished with one or two in like manner. The position of the respective baths over or near the furnace of each hypocaust may be taken as certain, as it is the usual arrangement both in public and private buildings. They were constructed, in all likelihood, in the same way as those to be found in the *caldaria* of all the public baths in Pompeii, viz., by parting off a space at the end of a chamber by a dwarf wall between 2 and 3 feet high, built upon the floor. This wall had a step or two on its outer and one on the inner side, the one on the inside serving as a seat for the bathers. Such, it is to be presumed, would have been the method of construction employed in the *caldarium* R ; in S the dwarf wall, to form the bath, would have run

across the large recess in the western side of the chamber.¹

As has been mentioned, the upper floors of the hypocausts have everywhere disappeared, save a fragment or two. This may partly be accounted for by the height (over 3 feet) and slenderness of the *pila*, which "were formed of square flat bricks placed one upon another without mortar,"² and also by the thinness of the floors themselves, which, judging from a fragment remaining in the north-east corner of chamber S, were not more than 8 inches in thickness.³

The walls of the buildings just described, as well as those forming the enclosure N, may be taken to have had an average thickness of 3 feet. The size of the stones employed in some of the details is worthy of remark. For instance, a stone was found lying outside the ruined walls of the apse of the *caldarium* S which had been worked to fit a considerable portion of the curvature of the semicircle. It was probably part of the cornice of the apse. Further may be noted, as exemplifying the care with which the Roman builders sought for the most massive material available for their constructions, the sills and jambs of the doorways of chambers Q and R.

It should be noted also that fragments of window glass⁴ were dug up in the excavations, proving that the various apartments of the baths were lit by glazed windows, and that the external walls of the different groups of buildings were plastered and treated with colour, for the ruined walls of the apse of the *caldarium* S, when uncovered, were seen to have been painted in stripes of red and yellow. Altogether the external aspect of the buildings, as seen from the ambulatories of the courtyard, must have been bright and gay.⁵

Having now recorded all that can be discovered respecting the *basilica* and the public baths, certain structures, apparently depending on one or other of those edifices, have yet to come under examination.

It has been noted that between the western ambulatory of the baths and the supposed forum bounding the *insula*

¹ For the arrangement of Roman baths as indicated, see J. Overbeck, *Pompeji*, 209, 217, 234.

² *Uriconium*, p. 115.

³ *Ibid.*

⁴ *Ibid.*, p. 214.

⁵ *Ibid.*, p. 114.

on the west occurs a space of some size filled with various structures. The first of these to be spoken of here is the group of constructions occupying the lower half of this space. It formed a small court U,¹ about 46 feet square, with a flooring of *opus spicatum* laid at a level from 2 to 3 feet above that of the neighbouring ambulatory of the Baths and the external roadway. The court was bounded on the west by a wall in which were two openings: the one to the north, 10 feet wide, had originally a sloping way to it permitting the entrance of carts and horses; the other at the south corner, 6 feet in width, was intended for people on foot, as it had two very much worn steps in front of it. In the centre of the court were some traces of constructions, but too slight for anything to be made out from them. On the north side was a range of small compartments, four in number, and on the south a similar range of three. On the east was another range of three, with a fourth occupying the north-east corner. All these compartments were, roughly speaking, 9 feet square, and the wall bounding them towards the court stood 2 feet high above the floor. Those on the east side had the peculiarity that their dividing walls were incomplete, leaving a passage between their ends and the wall at the back, which was the back wall of the western ambulatory of the Baths. Also, at the south-west corner, the continuity of the ranges of compartments was interrupted by a break in which steps to a lower level, that of the ambulatory just mentioned, are said to have been found, this lower level showing fragments of a floor of *opus spicatum* similar to that of the court.

The court was probably an uncovered one, the ranges of cells being roofed, but each compartment open, in all likelihood to its fullest extent, on the uncovered area. From the fact that in two of the divisions were found a great quantity of bones of animals and horns of deer, partly dressed, and also from weights having been dug up on the spot, Wright came to the conclusion that the building was a market place. This may have been so, but a discovery made in digging out the first cell on the north side (22) perhaps throws some light upon the uses

¹ Called by Wright "the little market place." See for an illustration of this court, Plates 18, 19, Vol. XV, *Journal of Brit. Archaeol. Assoc.*

to which the place was put, at least for the greater part of the accommodation it afforded. The cell or compartment in question "was found," says Wright, "to be on less than ten feet deep, with a low cross wall at the bottom. In it was found a quantity of unburnt charcoal, with some remains of mineral coal."¹

Now it is quite certain that a considerable quantity of fuel must have been required for the heating of the hypocausts of the Baths which were in use throughout the year, but in all the various parts of the establishment there has not been observed any adequate place for the mass of fuel which would be required. That fuel evidently consisted not only of charcoal, but of mineral coal as well, cinders of the latter having been found in the hypocausts and in the stokehole T.² It seems therefore not unlikely that this court, with its many compartments, may have been used principally as a fuel store for the Baths, some, at least, of its compartments being coal bins. The fuel actually required was probably stacked in those of its eastern side, where a way at the back gave access to their contents. The corridor V, with a door at its north-east corner, would allow of this store being replenished perhaps without entering the court, if need were, and doorways in the wall of the western ambulatory of the Baths, but certainly at the north end of this eastern range (at 23), would permit of fuel being readily supplied to the requisite points at no great distance. This suggestion might be deemed worthy of consideration; and if all the cells of the court U were dug out, as does not seem to have been the case, some confirmation of this opinion might be obtained.

Crossing the passage L L, affording entrance to the courtyard of the Baths, the *latrinæ* will be found which served both the bathing establishment and the *basilica*. These occupy a court or enclosure 65 feet long by 19 feet 6 inches wide, lining the northern end of the western ambulatory of the Baths. There was a means of communication with them from the *basilica* by the doorway at 4, and an entrance to them from the ambulatory just mentioned, at 24.

The enclosure W was floored with *opus spicatum*, and

¹ *Uriconium*, p. 151.

² *Ibid.*, p. 115.

against its eastern wall lay a trench (25) 2 feet 6 inches wide, with a slight retaining wall. This trench extended along the foot of the main wall to a point just beyond the entrance doorway, where a wall, projecting at right angles to it, appeared to cut off a portion of the northern end of the enclosure. A similar trench (26) against the western wall, but 1 foot wider, extended the whole length of the court and terminated at the northern end in a cesspool (27) lying against the southern wall of the *basilica*. This was about 9 feet deep, and there was a drain, apparently going either way, large enough for a man to creep up it.¹

In the main walls, over each of the trenches named, are a series of chases implying wooden constructions covering them.

To the west of the *latrinæ* is a space (X) between solid walls, 5 feet wide at one end and 6 feet at the other, and extending the whole length of the enclosure. At 15 feet from the southern end an aperture (28) occurs in the western wall, 10 inches high and 6 inches wide opening into the western and larger trench of the latrines, at 2 feet 6 inches below the level of the pavement, which was the probable depth of the western trench. The soil in this enclosure showed "traces of ammonia and phosphates," and was taken, when excavated, to have been a cesspool; but seeing the smallness of the aperture, and that a cesspool with a drain existed at the north end of the adjoining court, the supposition might rather be entertained that X was a reservoir containing water for flushing periodically the trenches of the *latrinæ*, the opening mentioned being fitted with a sluice gate for the purpose. How this reservoir could have been supplied with water can only be ascertained by a further and thorough examination of the spot.²

The two quadrangular chambers to the west of the latrines, and between them and the supposed *forum*, were considered by Wright to have been the workshops of workers in metal. The western wall of each chamber had two wide openings on the roadway (that of chamber Y

¹ *Uriconium*, pp. 366, 367, Report of Dr. Johnson, 1867. in the Roman baths at Silchester. *Archæologia*, Vol. 54, 228-9.

² See the arrangement of the latrines

PLAN N^O. IV.

1882-1883

has lost its central pier), each formerly filled, as shown by the stonework of the jambs, by a framework of wood on which doors were hung. In the centre of each area was a mass of masonry, which might have been a table, but was more probably the base of a pier supporting the roof. On the northern side of chamber Y were various remains of masonry, two of which appeared to have contained small furnaces. Many pieces of scoriæ were scattered about, and amongst them lay the bowl of an iron ladle.

The floor of each chamber was of cement laid nearly flush with the door sills, but the floor of Z had the peculiarity that it showed a surface of cement spread over less than half the western half, the rest of the area being filled, at a lower level, by a bed of sand, said to have been brought from a distance and perhaps used for moulds, for casting. Pounded granite was also found on this bed of sand, and "many fragments of fine glass were also scattered about."¹ On the northern side of the same chamber was a kind of bin (29) formed by a dwarf wall with a cross one about the middle of its length. In this was found a quantity of scoriæ and other refuse. At the corner of this bin nearest the door stood a cone about 6 feet high, built of various materials—clay, stones, and, here and there, pieces of mineral coal (30). In one side of the cone was a furnace "whose internal surface was vitrified to some depth. From the form and position of this little furnace it is quite evident that it must have been heated by a powerful blast." . . . "Remains of burnt charcoal were found in it, and on the ground near it."² On the wall of the bin close by, and to the right of this furnace, was a cylindrical mass of stone, still lying in the ruins, which was probably the base of an anvil (31). Scoriæ were scattered about everywhere, and in chamber Z many fragments of worked metal were turned up.

This is practically all that can be said concerning these workshops, and with these remarks upon them may be brought to a close the review of the various buildings whose ruins are or were to be found not only in the central *insula* of the Roman city, but within the circuit of

¹ *Uriconium*, pp. 161–2.

² *Ibid.*, p. 159. On the same page

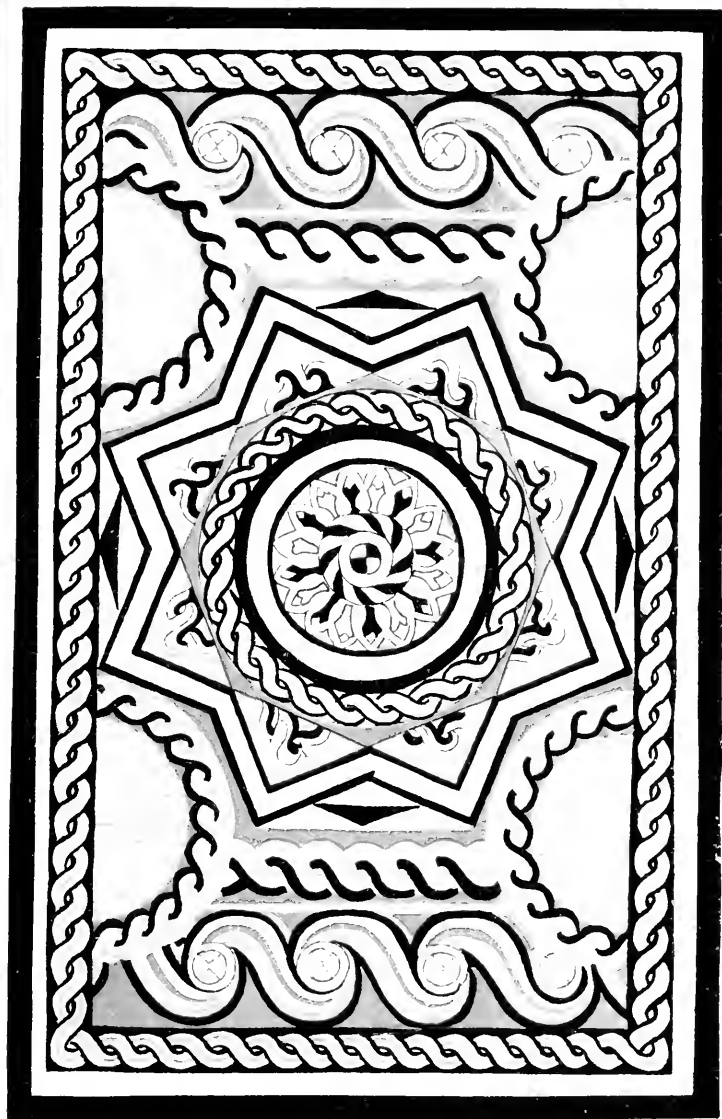
and on p. 162 may be seen illustrations of these remains.

its walls. Yet something more has to be added before this summary of discoveries on the site can be considered complete. Some further observations must be devoted to the mosaics and to such architectural fragments as have been preserved either within or in the neighbourhood of the city.

The few mosaic pavements found on the site have already been mentioned in this paper under the dates of their discovery. The only one of these of any importance is figured on Pl. II. Although an elaborate composition it has little interest in itself. This, however, cannot be said of the mosaic floor, fragments of which occupy the eastern half of the north aisle of the *basilica*. Its original plan may be seen on Plan IV, but with the details omitted for the sake of clearness, which omission is supplied in Pl. III, where every pattern is distinctly given.¹ A reference to either plan will show the disposition of the panels of which it is composed. The designs of eight of the panels could be made out. They consisted of geometric diapers made up of varying arrangements of square forms in the panels *d*, *e*, *f*, *g*, and *h*, and, in *a* and *b*, of triangles and squares set diamond fashion. Round *a*, *b*, *c*, and *e* are borders, whilst in the other spaces only a broad plain band outlines the diapers next the ground in which they are set. If we may judge from the existing fragments, it would appear that it was only every fourth panel which had a border, thus giving a variety to a composition which would otherwise have been somewhat monotonous in effect. The borders were varied in design. In *a* (the square end panel) the border is double, the outer one being a simple fret, the inner a line of triangles within broad plain bands, and this border crosses the field of the panel, taking the shape of a St. Andrew's Cross. In *b* a double row of triangles with broad plain bands surrounds the field, and the panel is bounded on either hand by a band of fretwork passing quite across the floor from side to side. Panels *a* and *b* are, as has been noted elsewhere, exceptional in arrangement. In

¹ The Institute is indebted to the courtesy of the council of the British Archaeological Association for the loan of this illustration, made by Mr. George Maw, for his paper on the *Mosaics*

of *Uriconium*, published in Vol. XVII of the *Journal of the Brit. Archæol. Assoc.*, and frequently cited in the present account.



WROXETER. PAVEMENT DISCOVERED IN 1827.

(From a drawing in a MS. volume by T. F. Dukes, entitled "Uriconium," in the library of the Society of Antiquaries of London).



c the border consists of a simple braid, the only curvilinear form to be found in this floor. The area enclosed by it appears to have been divided into three long compartments, but what they contained has entirely vanished. In *e* a band of fret of considerable size borders the field.

A reference to Pl. III will show that between the panels *b* and *c* there is a gap, from which the mosaics have disappeared, and that the same is the case between *d* and *e*; but, as in each instance the interval, if divided in half, would give spaces corresponding to two of the neighbouring panels, the conclusion may be safely drawn that the vacant intervals were originally filled by panels corresponding in size with those still traceable. Beyond *h* there are no further remains of the floor; but if a further panel be imagined, its western boundary would just show half the length of the aisle of the *basilica* in which these mosaics are laid. The patterns of the diapers suggest an imitation of floors of *opus sectile*—that is, of thin pieces of differently-coloured marbles or other material cut into various geometrical shapes and fitted together. In this floor such figures are formed with tesserae, averaging $\frac{5}{8}$ of an inch square, of two colours—brownish-black and cream colour, the ground in which the patterns are set being also of tesserae of somewhat larger dimensions, perhaps $\frac{3}{4}$ or $\frac{7}{8}$ of an inch square, and of a dull blackish-green hue. The only addition to these three colours is that of a red, in the braidwork border of panel *c*. These tesserae are of brick, as is always the case where a bright red is required.

It has been supposed that some of the materials of these mosaics were of foreign origin,¹ but a careful examination of specimens of the various kinds does not bear out this notion. The idea that Romano-British mosaics were composed of imported marbles is a common one, but in no case where the attention of experts has been drawn to the subject has this been proved.²

¹ Maw, *Journ. of Brit. Archaeol. Assoc.*, Vol. XVII.

² The following note, kindly contributed by Mr. Horace Woodward of the Geological Survey Office, gives the districts from which the materials of the Uriconian mosaics were in all likelihood derived. He says that the tesserae

of blackish-green hue “are probably bits of Caradoc sandstone, which might be matched in one of the quarries in the region of Caer Caradoc”; the black tesserae “are probably carboniferous limestone, which occurs north of Little Wenlock, near Oswestry, &c.,” and the cream-coloured “are also probably car-

In all the mosaic pavements yet found at Wroxeter these four colours, viz., greenish-black, reddish-black, cream colour, and brick red appear to be the only ones employed. Further afield, a pavement dug up at the Lea, near Shrewsbury, in 1793, exhibited the same limited range of colouring.¹ The fact is interesting, as giving support to the conjecture that the materials of the mosaics which adorned the buildings in the Romano-British towns were often procured within the districts in which these towns occurred, or at no great distance from them.

With respect to the floors of the different chambers of the public baths of Uriconium, it may be surmised that, for the most part, they were of *opus signinum*, though traces of tessellation were found in the vaulted hall D and the chamber H. Mr. George Maw, who saw what remained of them in 1861, says, in his paper on the pavements of Uriconium,² "The floors . . . resting on the flues of the hypocaust that were not tessellated, were composed of a very hard concrete, formed of lime and burnt clay, rubbed down to a smooth face and closely resembling the 'Lime Ash' floors used for barns and cottages in Devon and Somersetshire, made of the refuse of the limekilns, moistened and well rammed down. This refuse consists of nearly equal parts of lime and the burnt earth (adhering to the stone), mixed with a little coal ash, and would therefore be almost identical in composition with the artificial concrete used by the Romans." . . . "Some of the lime ash floors I have seen in Devonshire are as hard as any stone and of so close a texture as to receive by wear and washing quite a smooth and polished surface." This description, as will be seen, has reference only to the *suspensure* of the various chambers, but the floors of the hypocausts throughout the baths appear to be of a similar cement to that here described.

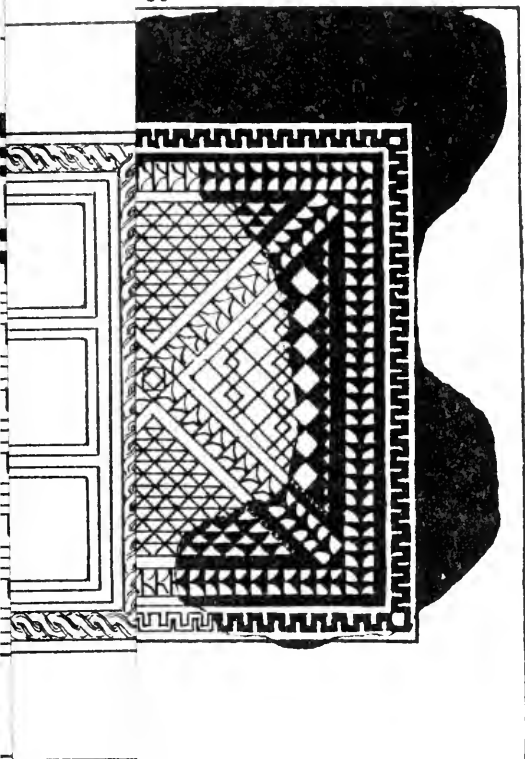
Passing from the consideration of the mosaics to that of the remaining architectural fragments on the site, it may

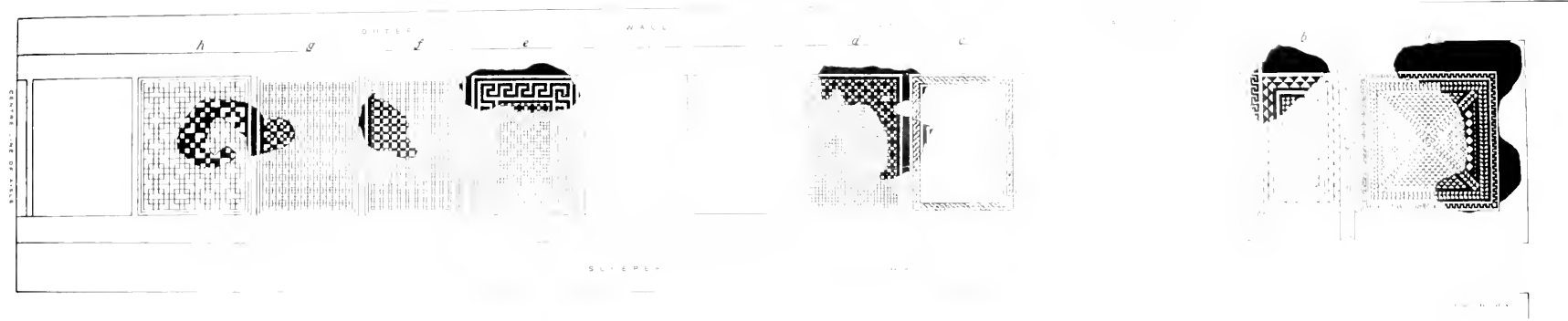
boniferous limestone." He adds, "for these particulars I am indebted to my colleague, Mr. W. W. Watts, M.A., who knows the Uriconian region well."

¹ Fowler's *Mosaic Pavements* contains an over-coloured representation of this pavement. A better one was published by Maynes of Shrewsbury, March 30th,

1794, from a drawing by Telford. It is of larger size than that published by Fowler, and gives the colours with apparently greater accuracy. Both illustrations have the advantage of being to scale.

² *Journal of Brit. Archæol. Assoc.*, Vol. XVII.

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be mentioned that such as could, with any probability, be identified as forming part of any building have already been dealt with in the account of the *basilica* and other structures. But a certain quantity of worked details, yet unnoted, claims attention. Although of importance in assisting us to form a judgment of the character and size of the buildings of the Roman city, these details have never as yet been examined with any accuracy. They consist almost exclusively of capitals, bases, and shafts of columns of which the greater number are to be found at Wroxeter, in the ruins of the Baths, and in the gardens of Mr. Everall and Mr. West; a small quantity is preserved in the Shrewsbury Museum, and scattered specimens are to be seen in the villages at no great distance from the site. At Uppington-on-Severn are two fragments of Corinthian capitals, together with an uninscribed altar lying in the churchyard—all three taken from the walls of the church when it was restored eleven years ago. This church dates from Saxon times. In the neighbouring garden of Mr. Ashdown's residence is a fine base of a column, which, judging by its size, must have come from the Roman city. At Withington, in the vicarage garden, is a small base also like the fragments at Uppington, taken from the walls of the village church when it was rebuilt. A much battered portion of a capital is to be found in the churchyard at Condover, and much ashlar from the city is worked up in the walls of Atcham Church, the same being the case with the church of Wroxeter itself. In fact, materials from the ruined town were evidently employed, doubtless to a considerable extent, at an early date, in the district surrounding it.

It is a fact worthy of notice that whenever architectural details are discovered on Roman sites in this country, they generally consist of bases, shafts, or capitals. This may arise from the forms of such fragments not being so adaptable for re-use as the more or less rectangular shapes of the remains of architraves and friezes. The former were therefore left on the site, while the latter were carried away to be worked up again. The way in which small shafts have been used up in recent times may be seen in a bye-road at Wroxeter, where for some yards the coping of the stone wall bound-

ing it is formed of columns split in half longitudinally.

The bases vary considerably in size. The diameters of the columns to which they belonged may be classed thus: (1) some from 5 to 7 inches; (2) some from 1 foot to 1 foot 7 inches; and (3) a few over 2 feet. The mouldings of these bases show varieties of what is usually called the Attic base. A marked feature is the use of a very large hollow or a cyma reversa moulding to unite the upper torus with the shaft.

The capitals are more varied in arrangement than the bases, as is usual. One capital especially is worthy of note (*see* Section 5, Plate IV).¹ They are mostly varieties of Doric, but there are some few examples of the Corinthian, order. The amount of variation of both classes of capital from the usual classical types is remarkable, and this is not only so here but on most other Roman sites in Britain. Two specimens of an enriched Doric are to be seen placed on portions of shafts at the churchyard gate at Wroxeter. They are said to have been fished up from the Severn where it flows past the residence of Mr. Everall (called "the Cottage" on the Ordnance map and on Plan I). These capitals are good in style; but as they are much degraded by exposure to the weather, which has effaced all the sharp edges of the carving, they have the appearance of being ruder than they were when perfect. They are carved also in an intractable material, a grey sandstone grit, which precludes delicate finish in the workmanship (*see* No. 17, Plate IV of sections, and Plate V, Fig 2).²

Besides the fragments of Corinthian capitals already named—viz., the large one, presumably part of a column from the *basilica*, and two small ones in Uppington Churchyard—there is another of some size preserved in the Shrewsbury Museum. It measures 1 foot 9½ inches in diameter above the astragal, and shows the first range of leaves and part of the second. The upper half is

¹ A sketch of this, but showing it reversed, as a base, and not to scale, is to be found in J. C. Anderson's *Uriconium*, Plate VIII, Fig. 6.

² An indifferent illustration of one of these capitals may be seen in C. Roach

Smith's *Collectanea Antiqua*, III, Plate VIII. Somewhat better representations of them are given in Wright's *Uriconium*, p. 209, and in J. C. Anderson's *Uriconium*, Plate VII. None are to scale.

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wanting¹ (Pl. I, Fig. 1). It was found in the court marked U, Plan IV, but could not have belonged to that building. The other large fragment of a capital in this museum, just referred to as from the *basilica*, was discovered in the same place (*see* Plate I, Fig. 2). This scattering about of details of the ruined buildings occurs whenever Roman sites have been examined.

Two other almost formless portions of Corinthian capitals are also to be found at Wroxeter in the gardens previously named.

With the exceptions already treated of (p. 142) the shafts of columns are of no great size, and have come from houses rather than from public buildings. There are however two, if not three, fragments to which some interest attaches from their having rare surface ornamentation upon them in the form of scale work. The larger fragment shows also at the lower end a broad band of a diamond or trellised pattern; and set in a long oval-shaped hollow in this scale work, about 7 inches above the trellised band, is a figure of Bacchus, in relief, nude but for a slight piece of drapery, with the thyrsus in the left hand and possibly a bunch of grapes or a cantharus in the right, the object being too worn to be made out. A panther beside him looks up at this object. The group is much worn from exposure and bad treatment, and from this cause appears more barbarous in execution than was really the case. The whole treatment recalls that of a gem, as if the subject might have been copied from one. The hollow in which the figure is set is 1 foot $3\frac{1}{2}$ inches high, and the figure nearly fills the whole height. The diameter of the portion of shaft, which unfortunately is fractured across the figure, is 1 foot 1 inch. This fragment is at present preserved in the ruins of the Baths (*see* Plate V, Fig. 1).

The second one, carved in very low relief upon the scale work with which it is covered, represents a figure of a winged genius kneeling upon a basket and holding in his left hand what appears to be a bunch of grapes. The figure is of inferior workmanship to that first de-

¹ This capital is figured in Wright's *Uriconium*, p. 157, and in Anderson's *Uriconium*, Plate VII, the former illus-

tration being the more faithful of the two. No scale is given in either work.

scribed, and the diameter of the shaft on which it is carved is smaller, being only $10\frac{1}{2}$ inches; but both these shafts probably belonged to the same structure. This second fragment is incorporated in the summer house in Mr. West's garden. Both were found built up in a wall, and removed and taken care of by the late Mr. Oatley, of Wroxeter, before any excavations for purposes of discovery had been made on the site. These shafts are of greyish sandstone.¹

The small bases of shafts named first in classifying the diameters of columns on this site belong to members of a class of dwarf columns the uses of which it is not easy to define. Those of small size were certainly occasionally employed as the supports of stone tables,² others of larger dimensions, placed on a dwarf wall, upheld the roofs of peristyles in domestic buildings.³ It seems doubtful, however, if this was not a somewhat exceptional arrangement, as these columns are seldom found on any site in numbers sufficient to indicate such an employment of them. Possibly they may have served, like the shafts in Saxon belfry windows, as dividing shafts to large window openings in gables. The small columns figured on Plate IV, Nos. 11, 12, are very like those used in Saxon work, but, from their mouldings, they must be judged Roman, as must be the bases Nos. 7, 19, on the same plate. If all the shafts used in belfry windows in Saxon times could be examined, it is possible that some of them at least would be found to be Roman brought from ruined buildings in the neighbourhood of the church into the fabric of which they were worked up. Besides the architectural details here described there is little else of the kind to be mentioned. Some few—two or three—shaped stones still lie where

¹ C. Roach Smith, *Collectanea Antiqua*, III, where on Plate VII is a very rough sketch of the lower half of the shaft, comprising half only of the figure of Bacchus, together with that carved with the winged genius. A better, but equally inaccurate, representation is given of the Bacchus in J. C. Anderson's *Uriconium*, Plate VIII, Fig. 7. No scale is given in any of these representations. C. Roach Smith calls the figure in the oval on the larger shaft Bacchus or Atys. Wright, in his *Uriconium* (p. 210), considers it the

latter, an opinion based apparently on a misunderstanding of the arrangement of the scanty drapery.

² See *Notes on the discovery of a Roman villa at Holcombe Downs*, by Captain J. Sackville Swann, *Archæologia*, LV, 462.

³ See *Account of the Remains of a Roman villa discovered at Bignor in Sussex*, by S. Lysons, *Archæologia*, XVIII, 218, and a paper *On a Roman villa in Spooner Wood, Gloucestershire*, by Prof. Middleton, *Archæologia*, LII, 651.

FIG. 1

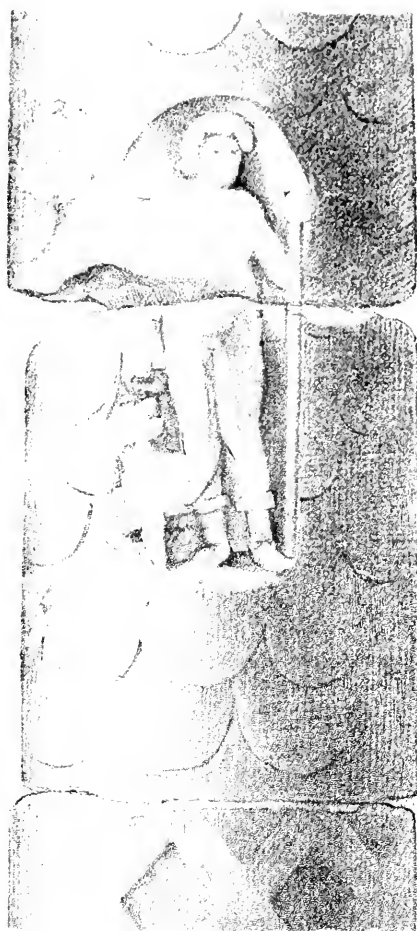
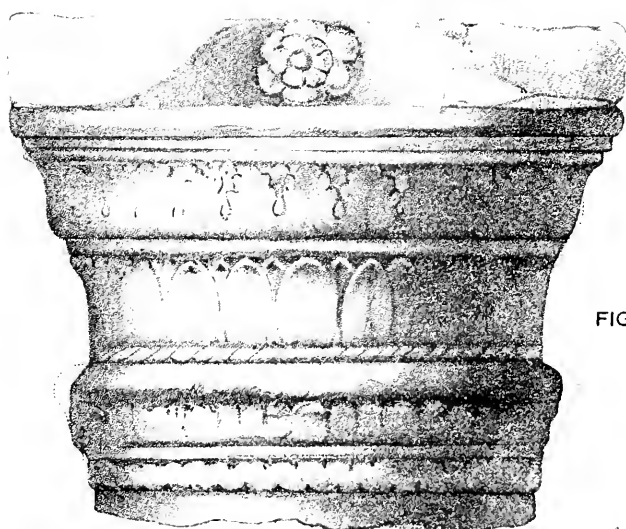


FIG. 2



G. E. Fox del. 1:76

they were found—close to the stokehole of the baths (18, Plan IV). They are perhaps the stones of which Wright says, “They appear to have been designed to form the top of the arches of doorways or windows.”¹ They are, in fact, coping stones from the tops of walls.

The material of these architectural fragments is the sandstone of the district, ranging in colour from deep red to nearly white (the small shaft No. 12 figured in Plate IV is partly red and partly white), and a sandstone grit which is always grey, a coarse intractable stone, although it has been employed for some of the capitals with delicate carving upon them. This stone is still drawn from quarries at Hoar Hill, not far from Wroxeter.

In concluding this review of such of the ruined edifices of Uriconium as are yet known, it may be said, without fear of contradiction, that no Roman site in Britain offers a better promise of important discoveries than Wroxeter. The violent destruction which appears to have overtaken the city has done more than anything, paradoxical though it may seem to say so, to preserve its remains for the investigation of future ages.² The fallen masses of roof and wall buried deeply the lower portions of the buildings to which they belonged, and the growth of brushwood, in all likelihood, over the heaps of rubbish, kept the site waste longer than would otherwise have been the case had the town perished by gradual depopulation.³ Though the plough—that universal leveller—has been at work for some hundreds of years above the ruined dwellings, it has less chance, from the cause assigned, of creating such havoc as in other sites. For instance, in the exploration of the Roman town at Silchester (a town which appears to have slowly died out, and, unlike Uriconium, was not over-

¹ *Uriconium*, p. 140.

² Evidences of this destruction and of the massacre of the inhabitants were everywhere visible in the explorations of 1861. Maw speaks of the pavements of the *basilica* as showing traces of the conflagration of the building, and Wright, in his *Uriconium* (p. 68), says, “Our excavations have proved, beyond a doubt, that the town was taken by force, that a frightful massacre of the inhabitants followed, and that it was then plundered and burnt. Remains of men, women, and children, are found

everywhere scattered among the ruins, and the traces of burning are not only met with in all parts of them, but the whole of the soil within the walls of the ancient city is blackened by it to such a degree as to present a very marked contrast to the lighter colour of the earth outside. (See also pp. 114, 118, 119, 163).

³ From *A Rental of Wroxeter* A.D. 1350, it would seem that a considerable portion of the land contained in the parish at that date was waste (*Uriconium*, Appendix No. III, p. 402 *et seq.*).

whelmed by sudden catastrophe) its destructive agency is visible wherever the remains of buildings are uncovered.

A rich field awaits the future explorer if ever further excavations are attempted at Wroxeter. The central *insula* has only been partially dug out, and what has been found gives promise of an ample harvest of discoveries to come. The *forum* of the town has yet to be found, and the various edifices by which it was surrounded. On the site of this city also, if anywhere in Britain, the foundation of Christian churches are likely to be revealed; for it has been conjectured, with considerable probability, that the destruction of the city did not take place till late in the period of Teutonic conquest.

The central *insula*, as has been said, is but half explored, and even something still remains to be done amongst the ruined walls already disclosed, for those who excavated them left certain important points doubtful which with little labour could be cleared up. It is earnestly to be hoped, if a time ever comes for further investigation of the site, that those who undertake it will have the technical qualifications necessary for the task. It has been only too often taken for granted that literary knowledge, or an intimate acquaintance with the minor antiquities of the Roman period, are sufficient qualifications for an investigator of the sites of Roman towns or villas. No view could be more erroneous, and yet no view has been so frequently acted on. Neither the one nor the other department of knowledge, without a certain amount of familiarity with the art of building, and some acquaintance with the methods of Roman construction, and the plans of buildings of the Period, will be of use to the explorer, and without such technical knowledge his researches will be costly and inadequate.

The path of the future investigator is clearly marked out for him. The first task to be undertaken should be the careful working out of the *basilica*, as yet but very insufficiently examined, and after that the remainder of the public baths still beneath the soil. Subsequently, owing to the nature of the site, it will be necessary to proceed with the labour of excavation from the centre

already disclosed. In this way only can the general plan of the city be ascertained. Random digging is as likely as not to prove disappointing, and, even if successful, would help but little towards a conception of the city as a whole.

Finally, acknowledgments and thanks are due to the Natural History and Antiquarian Society of Shrewsbury for permission to excavate in their grounds; to all who, either at Wroxeter or in its neighbourhood, have with ready courtesy allowed examination and study of the Roman remains in their possession; and also to the Society of Antiquaries and to the British Archaeological Association for permission to use illustrations, published or unpublished, having reference to the site.

DISTRIBUTION OF THE BUILDINGS OF THE DISSOLVED MONASTERY AT ELY.

By REV. D. J. STEWART, M.A.

The monastery at Ely was surrendered to the King on November 18th, 1539—the thirty-first year of his reign—and in 1541 its church became the cathedral church of the Holy and Undivided Trinity of Ely, and the old foundation was succeeded by “the Kings newe Colledge at Elye,” to which Henry VIII. assigned a considerable income to support a dean and eight prebendaries, “eight peticanons, four students in divinitie, xxiiij scolers to be taught Grammar, six aged men decayed in the King’s warres or Service,” and to provide a staff for the management of the estates of the new corporation. The whole site of the dissolved monastery, and all the buildings on it except “the Bishops’ Mansion House,” were to be converted into gardens and dwelling places for the various officers of the college; and four commissioners, viz., the Bishop of the diocese, Thomas Goodrich, Sir Robert Payton Knight, Philip Paris. and John Goodrich, Esquires, were appointed by Letters Patent, dated September 10th, 1541, and ordered to assign to the Dean and Prebendaries their several stalls in the choir, to put them “and the other Ministers and Persons above named into possession of their several Houses,” and finally to certify under their seals to the Chancellor and Council of the Court of Augmentation of the Revenues of the Crown that the instructions issued to them had been carried out.

The original award has not been discovered either at the Record Office or in the register of Bishop Goodrich at Ely; but there is a copy of it in the library of Corpus Christi College, Cambridge,¹ which is now printed at full length with the consent of the College. This document was bequeathed to this library by the Master of the College, Matthew Parker, who was the first Prebend of

¹ Nasmith’s Catalogue, Art. 27.

the second stall of the King's new corporation: it is unpagcd, and begins abruptly as follows:—

assigned to the deyns lodging

all the edifices & grownd from the gret hall to y^e galery wall westward, and from y^e olde hall with y^e kechyn called the priours kechyn with chappel & galery southward with y^e soyle of y^e same, except the stuff of y^e kechyn & except j parcell of the kechyn vnder the chappel chambre.

The gret hall to be for y^e petit canons with all the other menysters & officers to dyne and sup in with the ¹ voltes vnderneath y^e same & also the covent kechyn & the litel buttre adioynnyng to the same, with suffic' Implemenes of kechyn stuff botry and napry.

doctor cox :

The celerers logeng from the fermary northward with all y^e edificez both beneth & above as far as y^e buyldyng goth south ward with the garden extending to the dorter westward prouiso for the olde man loging : dur' vita /

dene of stoke

The paynted chamber from the firmar^y of the south to the outtermost part of the buyldyng northward & from the churchyard westward with all the edifices beneth & above wthe chamber annexed to y^e same called cottis chamber wthe chirchyard therto adioynnyng, and half the garden with the yle adioynnyng therto &c'

doctor meye

The blacke hostre from the firmary of the north with all the edificez both beneth & above southward with the chamber somtyme the celerers annext therto of the east & the garden annexed to the same sumtyme the firmaris with a kichen det firmar^y with the nether part of y^e chamberhous beryng half the charge of y^e coueryng of y^e same with the orchyard agaynst the same /

M^r. Custons

Sent hall with all the edifices both beneth & above from the firmary chappel north wall of y^e nerth & the wall of y^e garden of y^e said hall with the garden adioynnyng to y^e same of the south and from m^r hamondes lodgyng of the east to the black hostry of the west with chamberer house viz le ouer part beryng half the charges of the coueryng &c'.

M^r ayer /

m^r hamondes lodging from the firmary of the west wthe edificez both above & beneth with garden & orchyard annexed to y^e same / & the litle chappel in the fermery church except the leade² &c.

¹ The word "wells" (or "walls") is in the MS. here, but crossed through. ² sic.

M^r hamond

The almyry with all the edificez courtes & gardens belonging to the same lacking ij chymnez wyndous &c /

doctor lyson

The sextre hall as it is compassed houssez yarges & gardens &c /

m^r ward

The newe hall with the audite chamber and the chappel chamber called m^r lee chambre with the houf & vautes ther about with the litle garden & pultre yard & the pondes ther & the chappel chamber & parcell of the kechyn vnderneath the same lacking one pair stayres &c.

The chamber at y^e hall dore to be for an awditt chamber /

for petit canons

Knightes chambre . / want vnderneath f John corbet /

iiij chambers in y^e gatehouse for viij synging men

The ij porter his chamber and y^e gayl house

The shryne chambre . cottes

In the fermery

j chamber next to y^e grownd

f John bury

j chamber aboue /

f William Sewal

the lady chappel chamber /

f John spirard

f John skeel

3 chambers vnder one roof

f John Stoneham

f thomas mawndes

f Nicholas duxford

2 chambers one aboue an other

f W. Withred

The malt garner ~~ouer the stable~~¹ / The schole house, the schole master chambre the vschers chamber y^e chamber for y^e childer

The eator ouer the backhouse dore

The chamber next to the stayr hede for y^e ij sextens /

The vj beedmen in the new dorter q^ousqj

The wax house

The old hall at y^e hall dore

The brewhouse & the backhouse

Malting howse

long dorter with the privi dorter

The chamberers chamber

Milhouse with the scholchouse in y^e almyry

The olde hall in y^e sextry

The garner in y^e sextry next to y^e chirchyard

The bougry hall

The stones thorough in y^e churchyard

The butler to have a chambre in y^e volt

The stable & garner aboue.

The pettencyaris

The frayter

The chapter house to be chonged

¹ sic.

The necessary reparation & edificez to be done wher most necessary is & most nede first bi the holl agrement of the commiss' dean & chapter bi¹ ij of the prebendarys to be assigned both to pluck down & sell & reserve for necessary buyldyng & that bi bills assigned bi the hondes of y^e commyssyoners or y^e most part of them and the same to be acomptable before the same commyssyoners or dene & chapter iiij tymes in the yere / & for defawt in y^e expenditure, or for easyng them that have y^e charge, yt shalbe lawful to y^e said commyssyoners vpon Information made to them bi the dene & chapter or y^e more part of them to elect other ij from tyme to tyme ones a yere bi the discretion of y^e more part of the said commyssyoners.

M^r dene of Stoke and m^r ward elect pro hoc tempore

[this is the copy of the commyssioners order wryte bi m^r John goodrik]

According to this distribution document, five of the new Prebends were housed in extensions of the Norman Infirmary—one in the Almonry, one in the Sacristy, and the eighth in “the newe hall” which had been added to one which was probably as old as the transept of Abbot Symeon A.D. 1081. The Dean was provided with a fairly extensive residence, which has lately been assigned to the Head Master of the Grammar School.

How all the other buildings enumerated were appropriated to the members of the new corporation is not stated; but the power “to pluck down & sell” which the Royal Commission possessed, together with the proceedings of surveyors acting under the authority of the House of Commons in 1649, and the conversion of part of the site of the monastery into gardens, may explain the total disappearance of various official habitations common to all Benedictine monasteries.

The new “edificez” constructed out of the old ones do not seem to have been always so planned as to be easily adapted to the requirements of modern Society. Dr. Peploe Ward, who was collated to the first stall in 1771, built himself a new prebendal house; Dr. Waddington, who became the fifth Prebend in 1793, followed Dr. Ward's example; later still the private chapel of the Prior was turned into bedrooms, and the deanery expanded under Dr. Pearce.

Two distinct structures, the one without the church and the other within it, met with exceptional treatment.

¹ bi is indistinct in the MS.

² The part in brackets [] is in a different hand to the document itself.

The Bishops' mansion was withdrawn from spoliation by the award, and the shrine of the foundress was somehow rescued from the operation of Bishop Goodrich's injunctions by friends whose names are unknown.

The shrine has very little history: a new and costly *coopertorium* was suspended over it from the vault with a counterpoise in 1455, and was probably sacrificed to pacify the zeal of the Bishop's agents; but the greater part of the shrine was taken down and rebuilt on two other sites in connection with the high tomb of Bishop John de Hotham before it was placed where it now stands.

Several of the gardens allotted to the Dean and Prebends of "the King's newe College" occupied in 1842 what is now the park on the south of the Cathedral, and within some of these walled enclosures were the remains of the fish tanks of the monks. Fish preserves were usual in monastic and collegiate establishments: A *piscina*, as it was called, was part of the system of water distribution at Canterbury; there was a *vivarium* in the grounds of St. Peter's College at Cambridge, and a fish pond-close with nineteen tanks at St. John's College in the same university. The Ely preserves were arranged where the ground falls naturally from the level of the Prior's residence and chapel to that of the old "Brod lane," and were fed by a stream which flowed through them to the river. The highest of the series belonged originally to the Priors' establishment, and was assigned in the sixteenth century to Dr. Ward, the last Sacrist of the monastery, who became the holder of the eighth stall. The Commissioners awarded to him, along with the newe hall, "the little garden & pultre yard and the pondes ther."

This hall is now the residence of the Regius Professor of Hebrew south of the deanery, and in the garden attached to it was one of the ponds. The next tank of the series was in an orchard a little further south, which had been attached to the same stall.

The road from the Great Gate House to the east transept of the Cathedral passes between the sites of these two preserves. A plane tree stands on the site of the third pond, a chestnut tree on that of the fourth, and on the level ground there was a fifth tank with some what smaller ones on each side of it.

All the tanks but the uppermost pair were embanked, and the supply of water to each was regulated by a sluice or "Stanch"; but when the walls of the gardens were pulled down in 1843 and the ponds filled up, their embankments were levelled and the stanches taken away. In making these changes, the remains of ancient drains were found, but their courses were not traced out.

The block of buildings set aside by the Royal Commissioners for the Dean's lodging, and the domestic accommodation required by the contemplated college, was practically the Prior's residence, and that had probably been built at different dates. "The gret hall" is traditionally the camera built by Prior Crauden in the fourteenth century¹ "ex opposito capellæ . . . ad aquilonem," and a gallery, or galleries, connected the chapel with a hall to the west of the great camera; but the west compartment of the vault of the "gret hall" is earlier in design than the eastern ones, and the walls not only retain fragments of early decoration, but are so unsettled by great age that they may easily be the remains of a Prior's residence whose history is entirely lost. The west wall of the present deanery is about eighteen inches out of the perpendicular, modern cement hides the cracks in it, and its north-west angle has been buttressed. The roof is an old one, about which two theories have been put forward. Some of its admirers argue that it is the work of Prior Crauden; but others regard it as an old one to which he added pendant posts with handsome stone corbels. The latter view was supported by Professor Willis, who could not believe that either the Prior or his architect would have put such a burden as a new roof on walls which were obviously failing.

The Infirmary consisted of a handsome hall 104 feet in length with side aisles, pier arches, and clerestory like the nave of a church, and a chapel at its east end similarly arranged, and separated from it by a solid wall with a central doorway. A chancel had been added to the chapel by some unknown benefactor. Nearly all the fine Norman pier arches have been preserved, as well as the walls that filled them up, and converted the side aisles into chambers for the infirm and other members of

¹ *Anglia Sacra*.

the house, but the roof of the central aisle has been destroyed. There was nothing unusual in the *domus infirmorum* at Ely. The infirmary of the monks at Peterborough occupied a similar position, and was built on the same plan with a chapel dedicated to St. Lawrence at its east end. Similar arrangements existed at Canterbury, where a large part of the south aisle of the hall became the camera of the sub-Prior before the fifteenth century, and a table hall, as well as seven adjacent chambers for infirm monks, were added to it between 1338 and 1370.

At Durham two such important members of the house as the Bowcer and Terror did "lye in the Fermery," and in the same building was the Lyinge house "a strong prysonne" for great offenders. The infirmary at Norwich was parallel to the refectory, but there is very little of it left. The hall was about 90 feet long with an aisle on the south, and the chapel added about 30 feet to the length of the building.

Ely had a resident doctor, a garden in which herbs were cultivated for his drug store by a special gardener, a hall for blood letting, and a bath house, which hale old monks and even young ones were allowed to use occasionally; but where the medical staff of the monastery was located has not come to light. The medical establishment at St. Gall is represented as being close to the *domus infirmorum*: at Canterbury the bath house was on its south side; and at Westminster the remains of one have been found on the east.¹ The Ely monastery had an *Ostium versus balnearium*, and a *balneator* appears in the list of those to whom mandata were periodically issued, but the site of this gate has not been found out. There is the same obscurity about the position of the bleeding house which William Powcher, who was Prior from 1401 to 1418, added to the infirmary.² This building is apparently that which is named in a Sacrist's roll of the reign of Henry VII:—"In stipendio duorum carpentariorum pro reparacione de le Tresaunce versus aulam minutionum per vij dies iij s vij d," but the site of the tresaunce is uncertain.

¹ *Journal of Archaeological Institute*, Vol. XXXIII, p. 36.

² Lambeth Palace Libn. MS., 449.

The infirmary was obviously approached from the west by what the surveyors of 1649 called the dark cloister; but in the time of Henry IV carpenters made and mended a pentiz connected with it, of which no traces are left:—"Custus Cancelli dom' et muror'. In stipendio Johannis Reynes carpentarii et ij aliorum carpentariorum secum operantium per vij septimanas pro diversis in officio sacristarie et tenementis in villa faciendis et emendandis, et etiam pro le pentiz in infirmaria faciend' et emend'"

"The celerers' logeng," which provided a home for Dr. Cox, the Prebend of the first stall, was at the west end of the infirmary; but nothing is now left of it but some fragments of old walls, although late in the eighteenth century there were parts of it standing on the south side of the infirmary hall so considerable in extent and importance that Mr. Essex interpreted them to be the refectory and dormitory of "the old monastery of Etheldreda combined with her residence as Abbess."¹

Immediately to the east of Dr. Cox's residence was "The blacke hostre" assigned to Dr. Meye with the third stall. This hostelry was standing in the fifteenth century, as Sacrist Elyngham repaired its roof during the reign of Henry VI²:—"Reparacio domorum. In uno tegulatori cum suo servienti conducto per ix dies pro parvo dormitorio per loca tegulando et emendando, et super tectum de le Blake Ostrey per loca emendandum xijs vjd." It is pardonable to suspect that this building was the celerer's hospicium, as there was a chamber on its east side, "sum tyme the celerers," which went with it to the possessor of the third stall. Dr. Meye shared the "chamberhous"—whatever that was—with a brother Prebend; and may have been influential enough to secure a liberal share of the monastic fabric; but about 150 years ago a large part of the residence attached to the third stall was pulled down, and the black hostelry came to an end. A path on the south of the site is now known as Oyster Lane, which is evidently a modern equivalent for the Ostre Lane which once led from the Cathedral across Baker's close—now absorbed in The Park—into Brod Lane.

¹ Bentham's *History*, I, Addenda, p. 10.

² 17 Hen. VI, 1 Sept., 1438, 31 Aug., 1439.

Mr. Custons, the first holder of the sixth stall, was the next-door neighbour of Dr. Meye, but his house—The Sent Hall—has shared the fate of the cellarium. This hall was standing when the Parliamentary surveyors visited Ely in 1649, and their report mentions “an entry and faire hall tyled with . . . and also a skrene cont’ in lo’ 30 ft lat’ 20 ft and one parlour & closett,” etc., etc.; but this document is merely an uninteresting catalogue of rooms “in occ’ of Thomas Clair.”

Mr. Ayer, who was appointed to the fifth stall, had “Mr hamondes lodging” “and the little chappel in the fernery church,” so that the site of his house can be partly identified in spite of the summary proceedings of Dr. Waddington, which have been already pointed out.

Matthew Parker, Dean of the College at Stoke by Clare, for training secular priests, which he got through the interest of Ann Boleyn, was the first Prebend of the second stall, and had for his official residence the “paynted chamber” on the north side of the infirmary.

This building is no doubt the addition made to the infirmary by Alan de Walsingham and described in the following passage:—“Construxit etiam unam cameram lapideam plumbo tectam pulcram valde contiguam in Infirmaria, habentem cameram superiorem cum duobus caminis et inferiorem cum uno largo camino et puteo aquæ cum parvo celario sub custodia Infirmarii qui tempore fuerit et dispositioni Prioris et conventus post obitum fratris Alani remansuram.”¹

It is mentioned in a Sacrist’s roll drawn up during the reign of Henry VII:—“Solut’ pro lateys ad fenestras pictæ cameræ et granarii in Sacristaria ijs viijd.”

The camera thus described was the Mensa magistri infirmatorii, or Table hall, which was the special refectory of invalids and old monks, and seems to have been in course of erection in the eighth year of the reign of Edward III, when the roll of the Sacrist had the following special heading:—“Custus teglarie et nove camere. Item. Solut’ Henrico Pavag’ pro stipendio suo una cum stipend’ aliorum cementariorum et operariorum pro dicta camera ut patet per parcellas xxiijs xjd.”

At Canterbury the table hall projected from the

¹ *Anglia Sacra*, I, 646.

infirmiry hall on the south exactly as the Ely one did on the north; and at Westminster Mr. Micklethwaite remarks, "we may ascribe the buildings south of the chapel to the Master of the Infirmiry."¹

The north aisle of the fermery is breached on the west side of Alan's camera; but it is terminated by a residence of which the following description is given in the Parliamentary Survey of 1649:—"The Lecturer's house called the old mans house lyeth between a prebends logeing called the Archdeacons loging and the organists Mrs loging & cont' in long' & breadth ."

This memorandum, however, gives no hint of the nature of the buildings which originally occupied this part of the monastery.

"The newe hall" allotted to Mr. Ward, the last sacrist of the monks, is close to the Prior's chapel and evidently an extension of an old hall which may have been built by the first Abbot when he began the present church. The primitive vault which carries the old building has a much later construction added to it on the south; but the date of this addition is not known.

Portions of the Almery and Sextry which the Commissioners awarded to Mr. Hamond and Dr. Lyson respectively still stand in High Street. "The almery with all the edificez courtes & gardens belonging to the same" is now reduced to a long, narrow building facing the market place—a succession of vaults carrying what was once a hall with a kitchen at its west end.

"The Sacrist's office"—joining the Almery on the west—"was," according to Mr. Bentham, "almost new built" by Alan de Walsingham, "who made several additional apartments in it, & encompassed the whole with a stone wall; in the North west corner of which he built a square building of stone & covered it with lead, part of this he appropriated to the use of Goldsmith's work & for other purposes relative to his office."² A sacristy planned and built by so remarkable a man would have been an attractive relic of the fourteenth century, but there is nothing left of that portion of the priory in which his

¹ *Journal of Royal Archaeological Institute*, Vol. XXXIII, p. 36.

² Bentham's *History*, Vol. I, pp. 221-2.

authority was paramount but the shell of a long, narrow building.

The Commissioners' award does not give the site of the "Knights chambre" assigned to the "petit canons"; but it was standing in 1649, and is treated in the report of that date as part of the residence of John Buckridge, who, as the eighth Prebend, had succeeded to "the newe hall":—"and one other lodging called the Knights Lodging in occ' of Tho^s. Towhne Jun consisting a kitchen and closette below stairs, and over it a chamber and a closett and a garrett seeled and tyled cont' long' 30 foot lat' 12 foot and a little garden cont' about 4 perches. All which is in occ' of Geo Stonrigg Esq or one of his assignees. Signed by Geo Conye."

At Peterborough the Knights' Chambers were in the gatehouse built by Godfrey de Croyland, the original gatehouse of the Abbot's residence, now the Bishops' palace, the great room of which is known as The Knights' chamber.

Edmund Cotts, John Bury, and William Sewal, who all signed the surrender of the monastery, had residences given them, and Cotts had a chamber "annexed" to the table-hall of the infirmary; but when that was assigned to the Dean of Stoke, he seems to have been transferred to the Shryne chamber, wherever that was. Bury and Sewal had each one chamber somewhere "in the fermery."

The open space on the north side of the nave was the burial ground attached to the parochial church dedicated to the Holy Trinity which once stood there, and is so described in a Sacrist's record of the rents he received for shops or stalls let to traders who attended the Ely fair:—"pro una selda in cimiterio sancte trinitatis."

"The garner in y^e sextry" was, in the language of the award, "next to y^e chirchyard," and graves have been found further east as far as the charnel house about halfway down the Fore hill.

Stone coffins have been discovered in the narrow space between "The Lady chapel and the Cathedral which is known as Napes' burial ground, or the Hundred acres": and they have come to light on the south as well as on the north side of the church. The distribution document of the Royal Commissioners implies that the residence

assigned to the Dean of Stoke was in a "chirchyard," and remains of interments have been found in the basement of "the paynted chamber" and the garden outside it, so that this burial ground was probably in use earlier than the years 1334-5, when the chamber was being built.

When the east wall of the south-east transept was underpinned, stone coffins and the contents of coffins were found close to the foundations; and the excavations of 1850 inside the church revealed not only closed, but lidless coffins between the memorial chapels of the two Bishops Redman and De Luda.

When the foundation was prepared for the present stone pulpit part of a stone coffin was seen in the adjoining lantern pier.

WREATHS AND GARLANDS.¹

By TALFOURD ELY, M.A., F.S.A.

Ἰοῦετῶν λάχετε στεφάνων
τὰν ἐαρίερεπτον λοιβάν.

Pindar, *Frag* 45.

It is not so very long since papers on this subject were read by other members of this Institute, but the subject is a wide one, and I propose to keep for the most part to an early period and to Greek and Roman usages, and thus avoid going over the same ground. For, as old Sir Thomas Browne puts it, "The use of flowery crowns and garlands is of no slender antiquity."²

The widespread ecclesiastical use of wreaths on the Continent in modern times is dealt with in Rütter's *Die Pflanzenwelt als Schmuck des Heiligtumes*; while for the popular usage we may refer to many passages (e.g., pp. 175 foll.) in Mannhardt's *Wald- und Feldkulte*.³

The modern Englishman, alone perhaps among the nations of the earth, is prone to look with disfavour on the employment of wreaths for personal adornment. "She wore a wreath of roses," once a popular ditty, now sounds strange and antiquated, and savours of burlesque. The athlete, victorious on the path at Catford or Wood Green, would scarcely welcome the great hoop of laurel that I have seen flung round the neck of his brother cyclist in Berlin. Can this prejudice possibly be a lingering trace of ancestral Puritanism?

If, however, we shrink from actually ourselves wearing a garland, we are ready enough to lay such floral tribute at the feet of those we delight to honour among the heroes of the past. Thus within the last few months huge wreaths have been dedicated to Nelson's memory.

A more personal, and hence a more touching offering

¹ Read at the Monthly Meeting of the Institute, May 5th, 1897.

² *Treatise Of Garlands and Coronary Plants*.

³ Cf. Frazer, *The Golden Bough*, I., pp. 79 - 81, 83, 84, 86, 90 - 96, 98.



1



2



3



4



5

COINS WITH REPRESENTATIONS OF WREATHS AND CROWNS.

1. *Corona radiata*, Antiochus VI. 2. *Corona muralis* and *rostrata*, Agrippa.
3. *Corona radiata*, Ptolemy V 4. *Corona spica*, with head of Antonia.
5. *Corona civica*, Augustus.

was the wreath which the shrewd old statesman from the Far East, bending before Gordon's statue, laid at the feet of "the Friend of China" and his own most trusty ally. Here, at any rate, there was nothing of the ridiculous—nothing out of keeping with the character of the dedicatory.

Among ordinary people, too, a fashion has recently grown up of heaping wreaths upon the dead in somewhat wholesale style—so much so that indications are not wanting of an inclination to revert to simpler modes of testifying respect.

With us, then, the idea of the wreath is a funereal one. Not so in the Ancient World, where a garland of olive affixed to a door betokened the birth of a boy,¹ and where the lover hung chaplets of flowers at the portal of his mistress.² Among the ancients the dead were indeed crowned, but crowned as if still partaking of the pleasures of this world. The chaplet was the sign of feasting and joy³; the Graces, as Sappho sings,⁴ turn from those uncrowned.

Feasting and joy, be it remembered, were of old in no wise incompatible with religion, when wine and love, the theatre and the race-course, were all alike credited with the signal favour of heaven. Religion then, no doubt, interwoven as it was with the whole life of Classic times, must originally have prompted the use of the garland. Recent researches in folk-lore have demonstrated the universality in early ages of the belief in the supernatural potency of trees and plants. What more natural, then, than that feeble man should seek to carry about him some offshoot of so powerful a protecting force?

Thus, when a lowering sky threatened a storm, Tiberius crowned himself with laurel, believing that its leaves were proof against the attacks of lightning.⁵

Such shrub or flower, twined round the reveller's temples, might well supply the place of a bandage used to assuage the headache resulting from debauch; and as for the motive of the festal wreath, so dear to the lyric

¹ If the child was a girl the material was wool.

² Lucretius, IV, 1178; Tibullus, I, ii, 14; Athenæus, XV, 670, D.

³ Cf. Pindar, *Isthmia*, VIII, 14, 15.

⁴ See Athenæus, XV, 674.

⁵ Suetonius, *Tiberius*, LXIX.

poets of Hellas, it would seem to have been an ideal form of the wet towel of our own prosaic age.

Nor was this all: certain plants, it was believed, actually exercised a prophylactic power, and protected those who wore them from the evil effects of wine. Such were the myrtle and the rose, whose virtues are set forth by the physician Philonides, as quoted by Athenæus.¹

We need not, however, suppose that such lovers of beauty as the Greeks required scientific exhortation to induce them to avail themselves of Nature's fairest gifts.

"Violet-crowned" was the epithet the Greek poet loved to apply to the city of which he was so justly proud; and even at the present day the festive tables of Athens are literally covered with roses of the richest hue.

Et latet injecta splendida mensa rosa.²

The garland was then the natural ornament of the Greek. He wore it not on the head alone, but round the neck, as Alcæus, Sappho, and Anacreon tell us,³ partly no doubt as an ornament, but also for the sake of the perfume.⁴ Such a garland of myrtle and sweet-smelling flowers called *ὑποθυμῖς*, or *ὑποθυμιάς*, was especially affected by Æolians and Ionians.⁵

With the Romans it was originally far otherwise.

The *Corona*, indeed, of which we are now treating, was a very different thing from the regal *diadema*, or Oriental head-band (the forerunner of the modern crown), adopted by Alexander from the barbarian potentates whom he displaced. Thus it was not the laurel wreath on Cæsar's statue, but this white fillet attached to it, that roused the opposition of the tribunes⁶; and while the wreath habitually appears on the Imperial coinage, the diadem is first found on the coins of Constantine.

The crown, however, even in its simplest rustic phase, might well suggest tyranny to those who had but lately

¹ XV, 17.

² Ovid, *Fasti*, V, 335.

³ Quoted by Athenæus, XV, 16.

⁴ Athenæus in the above passage says: "Because the heart is there."

⁵ *Ibid.*, 22 *ad fin.* See also Plutarch, *Quæst. Conviv.*, Lib. III, 1, 2. Plutarch (*Quæst. Conviv.*, III, iii, 13) denies that *ὑποθυμιάς* refers to

position near the heart, for which he says *ἐπιθυμιάς* would be required. I observe, however, that the Opuntian Locrians were called indiscriminately *Epimenidian* and *Hypocnemidian*. See Roberts, *An Introduction to Greek Epigraphy*, p. 347.

⁶ Suetonius, *Cæsar*, 79.

rid themselves of Tarquin's galling yoke; at any rate, public and ostentatious display of such headgear was sternly repressed at Rome.

By a law of the Twelve Tables, preserved in the pages of Pliny,¹ one who had gained a *corona* by his own manliness, or through his slaves or horses, might be crowned therewith on occasion of his funeral. Such an exception, however, "proves the rule"; and we learn from the same author that a banker, one L. Fulvius, who had been indiscreet enough in the daytime to put his rose-crowned head out from his balcony overlooking the Forum, was forthwith haled off to prison by the Senate's authority. This was during the Second Punic War, and the unlucky financier was not let out till its close.²

A century or so later, indeed, the state of things had changed. Conquered Greece had led her conqueror captive in floral fashions as in many matters of greater import. Under the late Republic we find the dissolute Verres carried in a litter with one wreath on his head and another round his neck,³ Verres who, though no worse than many of his tribe, has had the misfortune to be exposed and pilloried by the most skilful of Roman advocates.

Under Augustus the free use of wreaths was common enough, to judge from Horace,⁴ Ovid,⁵ and Tibullus.⁶ So, too, under later Cæsars we find frequent mention of them in the Epigrams of Martial.⁷ We must not forget, however, that these authorities are poets, and as such are not tied down to matter-of-fact exactness of description. They dwelt in an atmosphere of Hellenic associations, and their language must not always be interpreted too literally—any more than our modern poetry with its make-believe shepherds and shepherdesses.⁸

Though the earlier Romans had strict notions as to the limits of floral decoration as applied to private persons,

¹ *Nat. Hist.*, XXI, 5.

² *Ibid.*, c. 6.

³ Cicero, *In Verrem*, Actio II. Liber V, 11.

⁴ *E.g.*, *Od.* I, 38, 2.

⁵ *Amorum* I, vi, 38.

⁶ I, 7, 52, "Et capite et collo mollia sarta gerat."

⁷ *E.g.*, V, 64, 4; IX, 90, 6; and 93, 5.

⁸ See Gareke, p. 163 of *Excursus* on Horace, *Odes* I. *De coronis convivialibus*. On p. 206 he remarks:—"Nam e Romanis, nisi me fallit memoria, unus Horatius, se dicit apio coronari." *Od.* I, 36, 15; II, 7, 23; IV, 11, 2: "In quibus exemplaria Græca sua, in primis Alcaicum secutus videtur."

they were in the habit of rewarding with wreaths or crowns those who had performed certain special services to their country ; and wreaths were habitually employed, too, in the performance of religious functions. From time immemorial branches and flowers have played an important part in the ministrations of religion, and we may, I think, reasonably connect such observances with the widespread cult of the sacred tree.¹

As marks of military distinction, on the other hand, we find the following² :—

- (1) *Corona obsidionalis*, or *graminea*, a wreath made of grass or flowers from the position of a beleaguered army, and given to its deliverer. From the nature of the case this was one of the rarest honours.³
- (2) *Corona civica*, of oak leaves, the reward for saving a fellow-citizen in battle. This oak wreath often figures in the Imperial coinage. (Plate I, Fig. 5.)
- (3) *Corona navalis*, or *rostrata*, a gold crown decorated with ships' beaks, given to such naval leaders as Agrippa. (Plate I, Fig. 2.)
- (4) *Corona muralis*, also of gold, but decorated with battlements. It was gained by the soldier who first scaled the enemy's walls. (Plate I, Fig. 2.)
- (5) *Corona castrensis*, or *vallis*. This was a gold crown ornamented with palisades, similarly presented to one who first forced his way into a hostile camp.
- (6) *Corona triumphalis*, the laurel wreath, latterly made in gold, worn by a triumphing General, and eventually the badge of the Emperor.
- (7) Not to be confounded with this, nor with the gold crowns presented by the provinces, was the *Corona Etrusca* with its *lemnisci* or ribbons, also of gold, held over the General's head during his triumph. This represented leaves, and was sometimes jewelled.

¹ Compare the words of Pliny (*Nat. Hist.*, XII, 2) : "Nec magis auro fulgentia atque ebore simulacra, quam

lucos, et in iis silentia ipsa adoramus."

² See A. Gellius, *Noctes Atticæ*, V, 6.

³ Pliny, *Nat. Hist.*, XXII, 4.

- (8) *Corona ovalis* (an "ovary" crown, to borrow Sir Thomas Browne's quaint diction), of myrtle. This was given to those who were granted an ovation.
- (9) *Corona oleagina*, of the olive, was granted to victorious soldiers as well as to their generals.

The origin of these military crowns, as the name of one of them shows, may be traced to the Etruscans, from whom Rome borrowed most of her ceremonial display. Etruria's workmen excelled in the manipulation of metal, especially gold, as is proved by the harvest reaped from her tombs;¹ which also exhibit, painted on their walls, chaplets of flowers, worn in abundance by priest and by reveller, by flute-player, dancer, and athlete. These painted tombs are, of course, comparatively late,² and may present us with ideas more or less due to Hellenic influences derived from Magna Græcia, or from direct commercial intercourse with Greece proper. As far, however, as the religious and military use of crowns is concerned, we may feel pretty sure that we have to deal with customs indigenous in Italy itself. In Rome at least the rules as to the proof of claims to military decorations³ were laid down with an accuracy and a punctiliousness that found no exact parallel in Grecian states, though at Athens there were rules as to conferring them. As for the numerous festivals on the banks of the Tiber in which floral decorations formed a conspicuous feature we cannot fail to be struck with their native and distinctive character, in spite of later efforts to assimilate the religious systems of Greece and Rome.

In Greece the custom of crowning the victorious athlete with the olive or the laurel was preceded in the Heroic Age by gifts of more material value, as the mass of iron, the axe-heads, and the caldron which Achilles is represented as offering as rewards for victory at the Funeral Games in honour of Patroclus.⁴ It was not

¹ In the Etruscan Saloon at the British Museum (in Case 92) is an ivy wreath of gold.

² In the earlier tombs the chaplets represented are of wool. See the re-

vised edition of Dennis, *Cities and Cemeteries of Etruria*, I, p. 395.

³ Especially in the case of the *corona civica*. See A. Gellius, V, 6.

⁴ *Iliad*, XXIII.

till the second Pythiad, Pausanias tells us,¹ that a simple wreath was proposed as the reward for victory.

Eurybiades and Themistocles, as protagonists in the great struggle against Xerxes, were awarded crowns of olive by the Lacedæmonians²; in the following century crowns of gold were frequently bestowed on public men, so frequently as to detract considerably from their value as a testimony to merit. Thus the Delian Temple inventories mention more than a hundred crowns of gold.

Still, Demosthenes was able to assert that crowns were not like drinking cups, to be valued by their weight, but that a small crown was as great a distinction as a large.³

Alexander, after the defeat of Darius, is said to have received crowns the total value of which reached the vast sum of 15,000 talents⁴; but the Greeks even of a later age seem never to have descended to the meaner spirit of the grasping Roman generals, who wrung from conquered provinces the money tribute styled *aurum coronarium*, in lieu of actual crowns.

So much for crowns as the reward of public services.

It is far more interesting to turn to the bright revelry of the Attic *symposia*, alike described in the pages of Xenophon and Plato, and faithfully mirrored on many of those painted vases which have come down to us in such astonishing numbers.

In these vase-paintings the wreaths figure in various scenes, and are formed of various materials. In his recently published treatise *Euthymides, a Study in Attic Vase-painting*,⁵ Dr. Hoppin tells us that on Greek vases the laurel wreath "is by far the most common of all, and is used by every master from the Epiktetan cycle downwards"; and that the wreath of vine-leaves "is not so common as the preceding one." Next in the order of the vase-painter's preference seems to be the wreath of flowers.

I have found some interesting illustrations of the uses of wreaths in the magnificent work on *White Athenian Vases* by Mr. Murray and Mr. Arthur Hamilton Smith, lately issued by the Trustees of the British Museum.

¹ Paus., XX, vii, 5. For a representation of the Pythian wreath on the coinage of the Delphians, see *Bulletin de correspondance Hellénique* for 1896, p. 48, and Pl. XXX.

² Herod., VIII, 124.

³ Dem., *Adv. Timocratem*, 485 c.

⁴ Athenæus, XII, 539.

⁵ pp. 26, 27.

On a lekythos from Athens (Plate IV) the wreath is still being tied together; on another from Eretria (Plate XXIa) it hangs with a mirror above a seated maiden. A second lekythos found at Eretria (Plate XIII) shows us a tomb decorated with a wreath and a lyre. This, coupled with the fact that one of the mourners is touching a lyre, suggests that the wreath may possibly betoken the dead man's preeminence in music or in song.

A lekythos from Locri (Plate XXIIIb) has for its subject Victory holding a wreath above a flaming altar.

These lekythi, all of which were probably made in Athens, are to be seen in the Third Vase Room at the British Museum.¹

The wreaths themselves indeed, like their wearers, have for the most part long since crumbled into dust: and as far as those of Greece and Italy are concerned, we can only look on their representations in marble, or on coins and vases, or in the paintings exhumed at Pompeii.

From the Fayoum, however, that indefatigable explorer, Professor Flinders Petrie, has recently recovered the remains of actual garlands, which the dry soil of Egypt has preserved to this day. Not only are the various materials easily distinguishable, but in some cases the colour remains. In the funeral wreaths found in the cemetery of Hawara the roses "had evidently been picked in an unopened condition, so as to prevent the petals from falling."²

The myrtle, so important a factor in the weaving of garlands, is found with the leaves still adhering to the stem, and—what is more wonderful—retaining that sweet odour for which, according to Theophrastus and to Pliny,³ the myrtle of Egypt was esteemed above all others.⁴ These wreaths are of Greek workmanship. For those of Egyptian manufacture reference should be made to a valuable paper by Mr. Newberry in the *Archæological Journal*, Vol. XLVI, pp. 429–431.⁵

The manufacture of garlands must have given employ-

¹ In Case D, Nos. 53, 26, 56, and 21. Cf. Nos. 78 and 25 (where a libation is poured), also in Case D.

² See Mr. Newberry's article in Petrie's *Hawara*, p. 47.

³ Theoph., *Historia Plantarum*, VI, 8, 5; Pliny, *Nat. Hist.*, 37. So also Athenæus, XV, 676.

⁴ Some of these wreaths are now placed in the "Students' Room" at the British Museum.

⁵ The Egyptian garland was copied as an ornament for both pottery and architecture. See Flinders Petrie, *Egyptian Decorative Art*, pp. 82, 83.

ment to many; as to Glycera of Sikyon, whom Pausias loved, and who formed the subject of his picture called "Stephaneplokos," the chaplet-weaver.¹ It was a Stephanopōlis, or seller of garlands too, who aided Peisistratos in his return from exile to sovereignty, and whose beauty, emulating that attributed to Athena, secured her a distinguished place in the catalogue of fair women set forth in Athenæus.²

These floral artists were not, however, always objects of such idyllic interest, for Aristophanes³ introduces a worthy widow as supporting her five small children by making garlands; and Parmenio captured forty-six *male* wreath-makers among the motley retinue of the last Darius.⁴

How the work was done may be seen in several of those Pompeian pictures which bring before our eyes so vividly the processes of manufacture in classic times. The simplest form of wreath was composed of sprays of myrtle or ivy, twisted together; sometimes flowers were thus employed.⁵

Si quis erat, factis prati de flore coronis.

Qui posset violas addere dives erat.⁶

The soldiers of Cheirisophos, however, wintering in Armenia, contented themselves with wreaths of hay.⁷

The materials were often more carefully united by means of *philyra*,⁸ the inner bark of the lime-tree. Thus Horace, posing as a man of simple tastes, cries "Displacent nexæ philyra coronæ."⁹

A more elaborate, but, one would think, less graceful, form was the *corona sutilis*, in which separate rose leaves were stitched down like scales on a band.¹⁰ Hence Martial's verses:—

Frontem sutilibus ruber coronis (IX, 91, 6)

and

Lassenturque rasis tempora sutilibus (V, 64, 4).¹¹

Special attention was paid to the growing of flowers

¹ Pliny, *Nat. Hist.*, XXI, 3, and XXXV, 125.

² XIII, 609. Cf. Aristotle, *Ἀθηναίων πολιτεία*, 14.

³ *Thesmophoriazusæ*, 448.

⁴ Athenæus, XIII, 608.

⁵ For an example of the wreath of palm see *Jahrbuch*, 1896, p. 8.

⁶ Ovid, *Fasti*, I, 345-6.

⁷ Xenophon, *Anabasis*, IV, v, 33.

⁸ This word *philyra* is used also to denote thin strips of *papyrus*. See Thompson's *Handbook of Greek and Latin Palaeography*, p. 33, note 5.

⁹ *Odes*, I, 38, 2.

¹⁰ See Gareke's *Excursus, De Coronis convivalibus*, p. 168.

¹¹ Cf. *Sutiles aptetur decies rosa crinibus*, *ib.*, IX, 94, 5.

suited for weaving into chaplets¹; and Theophrastus² makes the astonishing assertion that garlic and onions were planted beside them to improve their perfume!

When gold came into fashion as a material for crowns it was frequently modelled in the form of leaves. Thus in the famous procession of Ptolemy Philadelphus the images of Alexander and Ptolemy wore golden ivy-wreaths, and other personages were represented with olive-wreaths of gold.³ Accustomed as we are to the pasteboard and tinsel of modern pageants, we cannot but be surprised at the lavish provision of actual gold on that occasion, not only for the numerous crowns, one of which, adorned with costly gems, is said to have been 40 yards in circumference,⁴ but also for other objects, including a thyrsos 90 cubits long.

At Rome, too, there was great extravagance in such matters. Thus the Emperor Domitian appeared in public wearing a golden crown with images of Jupiter, Juno, and his favourite Minerva; while the priests in attendance, besides this august assembly, wore the image of the autocrat himself, also in gold.⁵ Yet in intrinsic value this display probably fell short of the thirty-three chaplets of pearls exhibited in Pompey's triumph.⁶

To sum up, then, we find the materials used for wreaths were originally, besides wool, natural leaves and flowers, materials occasionally imitated in horn and in silk. After a time gold was preferred in the case of public rewards. Silver, too, according to Pliny,⁷ was occasionally employed.

The primary purpose of wreaths was in all probability religious⁸; but their origin is lost in antiquity. "*Rem coronarium generi mortalium tantum non cœtaneam*" are the words of Pasquale.

In Egypt actual garlands are found in connexion with mummies of the Twentieth Dynasty, and their use is said to be implied in ritual of a far earlier date. They form a conspicuous feature in the delightful wall-paintings from Thebes of the Eighteenth Dynasty, to be found in the Northern Egyptian Gallery at the British Museum.

¹ Plutarch, *Quæst. Conviv.*, III, 1, 3.

² *De Causis Plantarum*, VI, 19, 1.

³ Athenæus, V, 201, 202.

⁴ "Quod nunc quidem prope incredibile est," says old Paschalius.

⁵ Suetonius, *Domitianus*, 4.

⁶ Pliny, *Nat. Hist.*, XXXVII, 6.

⁷ *Ib.*, XXI, 4.

⁸ As to the importance of wreaths in worship, see Attilio de Marchi, *Il Culto privato di Roma antica*, p. 140.

In the older "Homeric" poems, on the other hand—excluding the "Hymns"—we may look in vain for the wreath; but from Sappho downwards it is ever present; and at religious functions even inanimate objects, as altars, were crowned with flowers.¹

Deification of ancestors may have given rise to the constant practice of crowning the dead and decking the tomb with garlands.² Thus, Augustus scattered flowers on Alexander's body, and placed on his head a crown of gold.³ "The urn of Philopœmen," as Sir Thomas Browne reminds us,⁴ "was so laden with flowers and ribbons, that it afforded no sight of itself." A wreath in gold, Plutarch tells us,⁵ was placed by Hannibal on the silver urn containing the ashes of Marcellus. The portrait bust of Artemidorus⁶ (about A.D. 400) wears a wreath of gold; and at Tyndaris, in Sicily, several skulls have been found still crowned with thin gold leaf.

It was, however, as a sign of festive joy that the wreath played its most attractive part. It was a lover's gift; it was the symbol of marriage; it was the token of the birth of an heir; it entwined the reveller's heated brow. The wreath, too, was the outward sign of the bearer of good news. When the Spartans and their allies pulled down the walls of Athens that had so long defied them, they crowned themselves with flowers as the liberators of Greece.

The richly-clad chorus of the Attic drama appeared in crowns, sometimes of gold⁷; while the archon himself wore a chaplet as the badge of office. In historic times the victor in the great games of Greece received a simple wreath. The people of Scione crowned with gold their great deliverer Brasidas⁸; and throughout Rome's long career of conquest the *corona* was the coveted reward of bravery in war. Strangely enough, on the other hand, a chaplet was placed on the wretched captive's head when exposed for sale.⁹

¹ So, too, among the Romans, *e.g.*, Varro, *De lingua Latina*, VI, 22, says, "in fontes coronas jaciunt et puteos coronant"; and Cato, *De Agri cultura*, 143, "coronam in focum indat."

² "Antiquitus quidem nulla (sc. corona) nisi deo dabatur," Pliny, *Nat. Hist.*, XVI, 4. Cf. Rohde, *Psyche*, p. 204.

³ Suetonius, *Octavianus*, 18.

⁴ *Urn-Burial*, ch. III.

⁵ *Marcellus*, 30.

⁶ In the British Museum, Second Egyptian Room, wall-case 5.

⁷ Demosthenes, *Meidias*, 520.

⁸ Thucydides, IV, 121.

⁹ See Paschalius, *Coronæ*, VII, 7, *ad fin.* In the *Plutus* of Aristophanes (v.

Even Christians, with all their fanatical bitterness against the bright pageantry of their pagan neighbours, still were fain to adopt the crown as the symbol of victorious martyrdom. Thus Prudentius, in his *Psychomachia* (vv. 38, 39), represents Faith as crowning martyrs:

“Tunc fortes socios parva pro laude coronat
Floribus, ardentique jubet vestiriæ ostro.”

The ancients wrote quite a library of treatises on the subject of wreaths. The greater part of these works have perished, but we still have the dissertations of Theophrastus and of Plutarch, of the elder Pliny, of Athenæus, and of A. Gellius, which learned disquisitions have been duly set forth by Pasquale, a somewhat discursive writer of the seventeenth century, while the pith of them may be found in two excellent articles under the heading *Corona*—one in Daremberg and Saglio's great work; the other in Smith's *Dictionary of Antiquities*. If, however, we have lost the systematic works of Callimachus and Mnesitheus, of Apollodorus, of Elius Asklepiades, and of Claudius Saturninus,¹ we still possess a valuable mine of information in the inscriptions which—chiefly in our own times—have been gathered from all quarters, and especially in those minute specifications which record the offerings dedicated in the sanctuaries of Athens and of Delos.² Here we are at close quarters with the Greeks themselves, the very Greeks who wore the wreaths and sang the praises of rose and myrtle, from the days of Alcæus and Sappho to the latest carols of the gay and graceful triflers who long usurped Anacreon's name.³

Such faint fragmentary echoes, such fleeting glimpses of bright revelry are all that is left to us —

“Faded every violet, all the roses”—⁴

the garlands and their wearers have perished, and their music is only painfully dug up now and then as a fossil.⁵

21) a slave claims immunity from blows on the ground that he wears a wreath. This is probably an allusion to the religious significance of wreaths.

¹ As to Claudius Saturninus see Tertullian, *De Corona*, VII.

² See, for example, No. 367 in Dittenberger's *Sylloge Inscriptionum Græcarum*. Occasionally even the crowns themselves are represented in carving on the monuments.

³ In a collection of fifty-four of these *Anacreontea* I find more than a dozen referring to garlands.

⁴ Tennyson, in Jebb's *Greek Literature*, p. 60.

⁵ Excellent examples of the use of the wreath will be found in the collection of Cyprian sculpture at the British Museum, both in the Archæic and the Hellenistic divisions.

Proceedings at Meetings of the Royal Archaeological Institute.

April 7th, 1897.

JUDGE BAYLIS, Q.C., V.P., in the Chair.

MR. C. E. KEYSER, M.A., F.S.A., read a paper on "Aldermaston Church, Berkshire." After giving a short account of the lords of the manor and the successive owners of the Aldermaston estates, Mr. Keyser described the church and the necessary repairs which had recently been carried out at his expense under the direction of Mr. E. Doran Webb, F.S.A. Mr. Keyser stated that the church was probably built about 1120 on the site of an earlier one mentioned in the Domesday Survey; it was enlarged about the years 1260 and 1300, in the fifteenth century, also in 1660, and again at the beginning of the present century, when it was unfortunately thoroughly beautified. The mural paintings representing St. Christopher and two scenes from the life of St. Nicholas, the old painted glass, the shields inserted by Sir Humphrey Forster, and the various tombs, brasses, and slabs to the memory of members of the Forster family, especially the fine alabaster tomb with effigies of Sir George Forster and Elizabeth his wife, who died in 1526, were minutely described by Mr. Keyser.

An interesting discussion followed, in which Mr. W. H. ST. JOHN HOPE, Mr. E. D. WEBB, Mr. P. H. NEWMAN, Mr. GEORGE E. FOX, and Mr. M. STEPHENSON pointed out the various peculiarities and particular objects of interest, more especially with regard to the tomb of Sir George Forster.

Numerous rubbings of the brasses and inscriptions, photographs of the monument, of the mural paintings, and of details of the church were exhibited by Mr. A. H. LYELL, Mr. M. STEPHENSON, and Mr. Keyser.

The paper will be published in a future number of the *Journal*.

May 5th, 1897.

JAMES HILTON, F.S.A. (*Hon. Treasurer*), in the Chair.

MR. TALFOURD ELY, M.A., F.S.A., read a paper on "Wreaths and Garlands," and exhibited numerous photographs of ancient paintings and prints, and casts of coins in illustration of his remarks. Mr. Ely's paper is printed at p. 186.

Professor T. McKENNY HUGHES, M.A., F.R.S., F.S.A., read a paper entitled "A comparison of the flint implements of the paleolithic and the neolithic ages." A large series of flint implements was exhibited in illustration of the paper.

June 2nd, 1897.

JUDGE BAYLIS, Q.C., V.P., in the Chair.

Mr. H. W. SETON-KARR exhibited a large series of implements from the lost flint mines of Egypt, which had been discovered by him in November last in the Eastern desert in the Wady-el-Sheik district, between ten and thirty miles from the Nile. Among the large number of implements discovered are many new to science. The mines resemble ruined cities, and in each is a central work-place where most of the objects were found. These objects consisted of various flint ornaments, truncheon-shaped implements, clubs, axes, javelin points, sickles, and variously-shaped knives. Mr. Seton-Karr also exhibited flint implements from Jalelo, in East Africa, a place about 100 miles from Berbera. This find is of special interest, as it is the first instance of the discovery of prehistoric implements in Tropical Africa.

VISCOUNT DILLON, P.S.A., and Mr. W. H. ST. JOHN HOPE, M.A., contributed a paper on "An Inventory of the goods belonging to Thomas, Duke of Gloucester, in 1399." This inventory, from the accounts of the escheator for the counties of Essex and Herts, gives a list of the cloths of Arras, tapestry, beds, vestments and books for the chapel, plate, books, garments, arms, and armour belonging to Thomas of Woodstock, K.G., Duke of Gloucester, and seized in his castle of Pleshey, in Essex, on December 13th, in the twenty-first year of the reign of King Richard II.

This inventory will be printed in a future number of the *Journal*.

Mr. JAMES HILTON, F.S.A., read a paper on "The Coronation Stone in the Abbey Church of Westminster."

This paper will be printed in a future number of the *Journal*.

Notices of Archaeological Publications.

THE NON-CHRISTIAN CROSS. An enquiry into the origin and history of the symbol eventually adopted as that of our religion. By JOHN DENHAM PARSONS. Simpkin, Marshall & Co. 1896.

This is an extremely interesting little volume full of information which may well lead the mind of the reader to think and reflect; all calmly and learnedly considered without prejudice or bias. Moreover, the book is light in the hand, and well printed in good, readable type. The author first investigates the history of the cross as a symbol, and its many varieties or forms, including that known as the svastika; being thus interested the question arose as to the form of the Roman instrument used for criminal executions from which we are supposed to get our religious emblem. Differences of opinion have long existed on this point, the argument here, very temperately expressed, showing that the cross of the shape familiar to us was a fancy introduced not much before A.D. 700. Four different Greek words used in our Bible are all translated "crucify," yet not one of them means or meant "crucify." The pre-Christian and early cross was what we know as St. Andrew's, and was the symbol of life, a hope of life, the foundation of our own as well as other religions. Lastly are noticed the several forms of the symbol known as the labarum, assumed always to be entirely Christian, but shown here to have been used on pre-Christian coins. The zeal of some writers has prompted them to overlook many simple facts such as are here recorded, and we can only repeat that this little volume will well repay perusal.

A HISTORY OF NOTTINGHAMSHIRE. By CORNELIUS BROWN. London: Elliot Stock. 1896.

This is a popular edition of the author's history of this famous midland county, dealing for the most part with ancient and mediæval times, the developments of recent times being passed over with a very cursory mention. The author has ransacked every available source of information which would throw light on the history of county families and famous men, and of the numberless places of interest in the county, and has reproduced in a readable form a vast amount of detailed information which will be extremely useful to those interested in such matters. Besides this, chapters are added on the geology, legends, and dialect of the county, together with its architecture, and flora and fauna.

THE CORONATION STONE AT WESTMINSTER ABBEY.¹

By JAMES HILTON, F.S.A.

The story of the coronation stone which is now preserved in the seat of an ancient chair in Westminster Abbey rests on an assemblage of legend, fable, and fact; the smallest of these elements is the last, if it be possible to assign an intelligible measure to either. The particulars I now introduce are brought together for the first time into one view, and were collected for my own recreation. The popular notions run somewhat in the following line:—that the stone is the genuine one which was Jacob's pillow, as related in the book of Genesis xxviii, etc., and that it was set up at Bethel as a witness to his heavenly vision; that it was conveyed to Egypt, and after some marvellous wanderings partly conducted by the prophet Jeremiah, it reached Spain and Ireland, where it acquired the name of the "Fatal stone," and was used as the coronation seat of kings in that country; that it subsequently reached the island of Iona, where it was the death-bed pillow of Saint Columba; from thence it was brought to the mainland of Scotland, and was deposited for safety in Dunstaffnage Castle in Argyllshire, and was used there as the coronation seat of Scottish kings; that it was removed to the abbey of Scone, near Perth, by King Kenneth in the year 850, who caused it to be enclosed in a wooden chair with the prophetic couplet engraven upon it, and where, as a matter of historical fact, King Alexander III sat thereon when he was crowned in the year 1249. It was called the "Stone of destiny," and was used by a succession of kings until, finally, it was removed to Westminster in the year 1296 by Edward I, King of England.

The stone is a squared block of red-coloured sandstone, fitted with two iron rings for convenience of removal, and as it is said, once had inscribed upon it this couplet:

*Ni fallat fatum, Scoti, quocunque locatum
Invenient lapidem, regnare tenentur ibidem.*

¹ Read at the Monthly Meeting of the Institute, June 2nd, 1897.

Thus translated by Sir Walter Scott :—

Unless the fates be faithless grown
And prophet's voice be vain,
Where'er is found this sacred stone,
The Scottish race shall reign—

or, as another translator gives it :—

If fates go right, where'er this stone is found,
The Scots shall monarchs of that realm be crown'd—

a prophecy which was fulfilled when James VI of Scotland succeeded to the throne of England as James I, and was crowned at Westminster, where the stone was ready for him. Such is the outline of a confused and intricate tradition, a legend terminating with an unquestionable fact.

The old historians who more or less repeat each other in what they quote, relate, or assert, are—

John of Fordun, a canon of the church at Aberdeen :
he was alive in 1386.

Hector Boece or Boethius : he wrote in the earlier
part of the sixteenth century, and died in 1570.

George Buchanan : he wrote in the earlier part of
the sixteenth century, and died in 1582.

Raphaël Holinshed, who died in 1580.

John Speed, who lived from 1551 to 1629.

John Bellenden, the translator of Boece in 1536.

Holinshed is very definite in his statements. In the first chapters of his *Historie of Scotland* he relates the story of Gathelus, which, being abridged, runs thus (I quote from the folio edition of 1585, printed in black-letter): In the time of Moses and the captivity of the Israelites in Egypt, a certain noble man among the Greeks named Gathelus, the son of Cecrops, who built Athens, got into disgrace with his father, and fled to Egypt with a number of "strong and lusty young men," and settled there anno mundi 2416. He got into high favour with King Pharaoh, and married Scota, a daughter of Pharaoh. On the death of his father-in-law, another Pharaoh became king, and severe plagues fell on the Egyptians, whereupon Gathelus, fearing that evil consequences would fall on him, departed from Egypt with his wife

and his followers, and came to Spain and eventually settled in Galicia, where he founded the city of Brigantia, since called Compostella. Here he was intitled by the name of a king, acted as such, and commanded that his followers should be called Scottishmen after the name of his wife, and in order to distinguish them from the natives of the land. Disputes with the Spaniards led to a war, in which he was successful. The narrative then proceeds thus: Gathelus having made peace with his neighbours "sat upon his marble throne in Brigantia, where he gave laws and ministered justice to his people, whereby to maintain them in wealth and quietness. This stone was in fashion like a seat or chair, having such a fatal destiny, as the Scots say, that wheresoever it should be found there should the Scottishmen reign and have the supreme governance. Hereof it came to pass that first in Spain, after in Ireland, and then in Scotland, the kings which ruled over the Scottishmen received the crown sitting upon that stone until the time of Robert, the first king of Scotland. The inscription also of the stone, though engraven long time after, as should appear, was this:" (observe the abbreviation of the fifth word)—

"Ni fallat fatum, Scoti, quocunq; locatum
Invenient lapidem, regnare tenentur ibidem"—

which, Holinshed says, may be translated thus:

"Except old saws do fail,
And wizards' wits be blind,
The Scots in place must reign
Where they this stone shall find."

In course of time the Scots, wanting more room, migrated from Spain to Ireland, where, among the events of many succeeding years, they having increased in "wealth and puissance," fell out among themselves and raised up a king of their own who was not "a partaker in their factions," one Simon Brech from Spain. He accordingly came to Ireland and "brought thither with him, among other princely jewels and regal monuments, the fatal stone of marble wherein he caused himself to be crowned . . . in the year from the creation of the world 3270 . . . and before the incarnation of our Saviour 697." As time went on the Scots came to

Scotland, where they set up another king, called Fergusius, from Ireland, who "bringing with him the marble stone that he might conceive the better hope to reign there as a king." He held a parliament of his numerous followers in Argyll to arrange how to dwell in safety under one king "whom they would thenceforth follow and obey." "As there was none thought so meet as Fergusius, and that as the chair of hope was also brought with him, they concluded by whole consent to commit that charge unto him, and so, to the great rejoicing of the people, he was placed upon his marble stone and crowned king . . . in the year after the creation of the world 3640."

The coronation stone is not mentioned by Holinshed in the account he gives of many successive kings of indifferent and evil repute, until he relates how the good King Connall died in the year 579 A.D., and was buried at Iona through the assistance of Saint Columba. Kinnatill succeeded as king: he had a fatal illness, and a short reign of fourteen months. The saint having seen to his obsequies brought forward Aidan, his nephew, to be king, in fulfilment of a prophecy and in accordance with the nomination of Kinnatill on his deathbed. The history proceeds thus: "After the body of Kinnatill was interred, according to the manner in Colmekill (Iona), Aidan received the crown sitting on the marble stone after the custom of those days used, by the hands of that holy father saint Colme, who laid his right hand upon the king's head, and in his left holding his crosier" made an exhortation to the king and people. After many years Saint Columba, "now almost wasted through age and also sore troubled with a rheumatic humour, fell sick and died . . .," some say in his own house at Iona, others say on another island, while Irish writers affirm that he died at Dune in Ireland, and was buried there. No mention is made of his having used the stone as his deathbed pillow. Aidan died shortly after (about the year 606), having reigned thirty-seven years.¹ It is said

¹ The words of Holinshed are, "Neither did Aidan the Scottish king live long time after, for hearing (as is said) that saint Colme was dead, shortly thereupon, more through griefe than by force of sickness he departed this worlde after that he had reigned 37 yeares in

the governement of the Scottishmen, he died about the yeare of our Lord 606." Here the historian is in error, for according to his own dates Aidan reigned less than twenty-seven years. That, however, is immaterial to our subject.

that he was the first Christian king of Scotland. After him about twenty kings are recorded.

Kenneth II became king in 834 A.D. The history relates, at page 132, that he destroyed the Pictish kingdom together with almost the whole nation; "he caused the marble stone which Simon Breke brought out of Spain into Ireland, and the first Fergus brought out of Ireland into Albion (*i.e.* Scotland) to be brought now from Argyll (where till that time it had been diligently kept) into Gourie, which region before appertained to the Picts, there to remain from thenceforth as a sacred token for the establishment of the Scottish kingdom in that country; he placed it at Scone upon a raised plot of ground there; because that the last battle which he had with the Picts was fought near unto the same place, the victory chancing to the Scots. Upon this stone (as before is rehearsed) the Scottish kings were used to sit when they received the investiture of the kingdom." Some writers have recorded that "by the commandment of Kenneth, at the same time when this stone was thus removed, those Latin verses were engraven upon it, whereof mention is made before when we spake of the aforesaid Fergus the First coming over from Ireland into Albion (*i.e.* Scotland)¹ there to reign."

In the ninth century we read of kings receiving investiture of the kingdom at Scone, and that Indulph was placed in the marble chair at Scone to receive the crown after the death of Malcolm in the year 959 A.D. And his various successors were also crowned at Scone in the usual manner.

Passing over an interval of many years, and arriving at the year 1249 A.D., when King Alexander II died, the history narrates, at p. 197, that at Scone "after Alexander the second was thus dead and buried, his son Alexander the third of that name, not passing nine years of age, was proclaimed king. There was no small adoo on the day of his coronation amongst the nobles, for by reason

¹ The name Scotland occurs in the Saxon chronicle for the first time. It was applied by the Saxon historians to the country north of the Forth and Clyde between the years 900 and 940.

The Latinised form of Scotia was transferred from Ireland to the present Scotland for the first time in the reign of Malcolm II. (1004-1034).

of the observation of the stars, it was judged to be an unfortunate day for him to receive the diadem. And again some held opinion how he ought to be made knight first, before he were crowned; so that thus they were at strife together, in such earnest manner, that it was doubted, lest this contention would have bred some great inconvenience, had not the earl of Fife prevented the same, in causing upon a sudden the crown to be set upon the king's head, being placed in the marble chair according to the custom, without regard to the frivolous allegations of them that spoke to the contrary." He died in 1290. Very troublesome times ensued, until Edward I, King of England, interfered, making successful war throughout the country, and ending as thus related by Holinshed: "Moreover King Edward at his returning into England took the chair of marble with him, and causing it to be conveyed to London, did place it at Westminster, where it remaineth yet unto this day." That took place in the year 1296.¹

Now let us see how the matter is treated by a modern commentator, avoiding as much as possible repeating what has been already mentioned. Mr. Skene, a well-known investigator of Scottish history, especially as it is recorded in the ancient chronicles, thus speaks in a paper read before the Society of Antiquaries of Scotland and printed in Vol. VIII of their *Proceedings*, pp. 68-99, and published separately in a thin 4to volume entitled *The Coronation Stone*, by William F. Skene, Edinburgh, 1869. The paper commences thus: "The legend of the Coronation Stone of Scotland, formerly at Scone, and now at Westminster Abbey, is intimately connected with the fabulous history of Scotland. The tale of its wanderings from Egypt to Scone, and of its various resting places by the way, is, in fact, closely interwoven with that spurious history which, first emerging in the controversy with England regarding the independence of Scotland, was wrought into a consistent narrative by Fordun, and finally elaborated by Hector Boece into that formidable list of mythic monarchs who swayed the sceptre over

¹ Bellenden, who translated the *Chronicles of Boethius* in 1536, makes this disparaging remark about the

coronation stone: "in which it was vulgarly reported and believed that the fate of Scotland was contained."

the Scottish race from the 'marble chair' in Dunstaffnage. The mists cast around the true history of Scotland by this fictitious narrative have now been in a great measure dispelled. Modern criticism has demolished the forty kings whose portraits adorn the walls of the gallery in Holyrood,¹ and whose speeches are given at such wearisome length in the pages of Boece. But the legend of the Stone of Destiny, or Fatal Chair, has taken such hold on the Scottish mind that it is less easily dislodged from its place in the received history of the country; and there it still stands, in all its naked improbability, a solitary waif from the sea of myth and fable with which modern criticism has hardly ventured to meddle, and which modern scepticism has not cared to question. It is still believed that the stone was peculiarly connected with the fortunes of the Scottish race, that it was preserved for many generations at Dunstaffnage, and that it was transferred from Argyllshire to Scone in the ninth century when the Scots are said to have conquered² the Pictish nation." "But the history with which this legend is connected having now been rejected as unquestionably spurious, it is surely an inquiry of some interest to what extent any part of the legend is really historical, or how far it must share the same fate." In another passage Mr. Skene says: "The forty kings are purely fabulous; but with Fergus MacErc the stream of fictitious narrative flows into that of history, for he is the first of the historic kings of 'Dalriada' who founded the Scottish colony of Argyll in the sixth century; and the historic kings of 'Dalriada' are now interwoven with the fictitious monarchs in Boece's tale. It is remarkable that when the historical element enters, Dunstaffnage disappears, and Icolmkill or Iona takes its place."

The author (Mr. Skene) proceeds to examine the early

¹ The portraits at Holyrood Palace of early kings of Scotland, "106 in number in a style truly barbarous," were mostly executed by James de Witt, a Dutchman, about the year 1681, either from living models out of the labouring population of Edinburgh, or pure inventions of his own imagination. He worked to order, and the sums paid to him are on record. Fordun wrote between 1381 and 1389;

he gives a detailed list of kings, beginning with Fergus, contemporary with Alexander the Great of Greek history, 356-323 B.C.

² It is remarked by another critic that "the entire extirpation of the Picts and the obliteration of their language by the Scots is the most groundless fiction that has ever offered itself for history."

features of the legend, quoting the words of Pennant's *Tour in Scotland*, and saying that the stone in question found its way to Dunstaffnage, where it was used as the Coronation Chair until it was removed to Scone, and there it remained until removed to Westminster by Edward I, and with it, according to prophecy, the empire of Scotland. The latter part of this account, he says, is unquestionably true. It is true that such a stone was preserved at Scone, that Scottish monarchs were crowned upon it, and that in 1296 it was removed to Westminster. Fordun gives a particular account of the coronation of Alexander III at Scone in the year 1249, and Mr. Skene describes the ancient condition of that place at some length. The stone is mentioned by Hector Boece, who wrote his *History* in 1527, which in 1531 was translated by Bellenden. Boece relates how, in the time of the Exodus, a certain coronation stone was in Egypt, and afterwards it reached Scotland; in after ages it bore the inscription (above mentioned), which Bellenden thus translates into the Scottish vernacular—

The Scottis sall brwke that realm as native ground,
Geif weirdis faill nocht, quhairever this chair is found.

Here we have the first record in print of the alleged inscription. Fordun, writing between 1386 and 1389, quotes the prophecy “Ni fallat fatum,” etc., but does not say how the stone came to Scone. There is some confusion as to the identity of that stone with the one in legendary narratives, and of the precise origin of the so-called inscription; but there is distinct mention of the prophecy by Bellenden, writing in 1531—that is, before the birth of James I, King of England. Mr. Skene mentions the legends which I have already quoted from Holinshed's *Chronicle*; and as concerning the stone, or stone chair, brought from Spain to Ireland, he observes that there is much uncertainty among the different narrators whether that was the same stone as was brought to Argyll; that, according to Fordun's chronicle, a stone of marble shaped like a chair (“*instar cathedræ*”) was brought up by an anchor cast in the sea off Ireland, from which a marble chair was cut such as is represented on p. 76 of Mr. Skene's paper by a woodcut copied from

the folio edition of 1577 of Holinshed's *Chronicle*. Mr. Skene says that the stone now at Westminster measures only 26 inches by $16\frac{3}{4}$ and $10\frac{1}{2}$ in depth. And moreover it was the custom among Celtic and other ancient tribes to inaugurate their chieftains or kings sitting on a stone appropriated by them to that particular purpose.¹ In winding up his investigation and sifting all the details at considerable length, Mr. Skene says: "The conclusion I have therefore come to is that there was no connection between the stone at Scone and the stone 'Lial Fail' at Tara in Ireland, and that the legends of their wanderings are nothing but myth and fable"; in fact, that the early tribes both of Scotland and Ireland used inauguration stones different and separate from each other.

Mr. Skene's work is reviewed in *The Banner of Israel* for 7th February, 1877, pp. 57 and 66; wherein it is said "Mr. Skene is a man of great learning and research, but his deductions, conclusions, and inferences from historical evidences are neither strictly logical, nor such as agree with the greater and best portion of that evidence as we now possess it." This opinion is not to be wondered at, since the writer thereof seeks support from chronicles nonexistent or supposed to be lost or destroyed.

The entire subject, in its varied aspects and its application to individual and national credulity, has engaged the attention of several writers; see a paper on "King Edward's Spoliations in Scotland" by Joseph Hunter, *Archæological Journal* for 1856, Vol. XIII, 245, and Dean Stanley's *Memorials of Westminster Abbey*. There is yet another matter for consideration in the endeavour to identify the stone with those mentioned in the ancient legends, viz., that of Geological Evidence.

Mr. Skene quotes the opinions of some distinguished geologists as to the nature of the stone; they attribute its origin to Scotland, where red sandstone is common, Professor Archibald Geikie remarking, "As a geologist, I would say that the stone is almost certainly of Scottish origin, that it has been quarried out of one of the sand-

¹ Such as the coronation stone at Kingston-on-Thames, now set up in the street there and said to have been used

from the time of our Saxon kings. See *The Antiquary*, Periodical Vol. VI, p. 271, for December, 1882.

stone districts between the coast of Argyll and the mouths of the Tay and Forth, but that there is no clue in the stone itself to fix precisely its original source." The late Dean Stanley, in his *Memorials of Westminster Abbey*, edition 1882, p. 52, writes: "Wherever it may have strayed, there need be no question at least of the Scottish origin of the stone. Its geological formation is that of the sandstone of the western coasts of Scotland."¹ Professor Ramsay has described the coronation stone as consisting "of a dull reddish or purplish sandstone, with a few small imbedded pebbles. The rock is calcareous, and of the kind that masons call freestone. Chisel marks are visible on one or more of its sides. A little mortar was in the sockets in which the iron rings lie, apparently not of very ancient date. To my eye, the stone appears as if it had originally been prepared for building purposes, but had never been used."² . . . That it belonged originally to the rocks round Bethel is equally unlikely, since, according to all credible reports, they are formed of strata of limestone." (See *Palestine Exploration Quarterly Statement* for 1896, p. 84.)

Mr. Skene's paper is followed (in the same volume of *Proceedings*) by another, "a Note" of six pages, by John Stuart, Esq., LL.D., who inspected the stone at Westminster: he calls it "a little thin fragment which, in its present shape, could scarcely be a suitable seat for anyone, still less for a monarch at his coronation. It seems obvious that the stone was either placed in a chair so that the king could sit upon it, or, that the stone itself was originally of a much greater size than it now is"; and he refers to the *Archæological Journal*, XIII, 250-253.

A writer in *Notes and Queries*, 1868, Ser. I, ix, 238, says that (*circa* 1824) "the block of stone stood under a very old chair, in colour and shape of a stepping-stone over a river: it is now a very nice hewn block, nicely fitted into the frame under the seat of a renovated chair. It does not look like the old stone of former days."

Criticism had been busy before Mr. Skene denounced the early chroniclers. In the *Quarterly Review*, Vol. 81, for July, 1829, there is an article of forty pages

¹ See Appendix I, for the extended extract.

² See Appendix II, where Ramsay's statement is fully quoted.

on the "Ancient History of Scotland" which says much against the veracity of the chronicles which include the narratives bearing on the coronation stone, although that stone is not particularly mentioned therein. These are the introductory words: "The situation of Scotland, in respect to her early history, was, till of late years, extremely odd. Her inhabitants believed themselves, and, by dint of asseveration persuaded others to believe them, one of the most ancient nations in the world, possessed of clear and indisputable documents authenticating their history up to the very earliest era of recorded time. This error was no mere transitory ebullition of vanity, but maintained and fostered by reference to divers respectable tissues entitled *Histories of Scotland*,—all ringing the changes upon a set of fables which had been ingeniously invented to prevent the disgrace of avowed ignorance. Hector Boece, in his *Scotorum Historia ab illius Gentis Origine*, first printed at Paris in 1526, is the artist to whose pencil the flourishes in the blank leaves of Scottish story are chiefly to be ascribed. He was certainly a person of learning and talent, since he was the friend of Erasmus, and is described by him as *vir singularis ingenii et facundi oris*. But when Erasmus tells us that even the thought of a falsehood was unknown to him, we can hardly suppose he ever read that work in which friend Hector

—"in imposition strong,
Beats the best liar that e'er wagg'd a tongue."

"There was little information probably to be gained from public records, which were not then, as now, accessible to every student; and this, indeed, is some apology for the gross errors of Hector's predecessors, and his credulity in adopting them; but it affords none for the various additions with which it has been his pleasure to embellish the elder figments; bolstering them out with plausible circumstances, and issuing absurd family legends, bardic traditions, and all the crazy extravagances of popular report, under the authority of a grave Principal, for such he was, of the University of Aberdeen." After alluding to Boece's repetition of the story of Cathelus and Scota, and the subsequent questionable stories of some

old "writers whom no author save himself ever saw or heard of, men of straw, mere names," the article proceeds "In this as in other cases Hector dressed up and adorned the rude fictions of early times; upon such principles this notable forger put forth his regular pedigree of Scottish kings, some few of whose names are to be found, unquestionably, in a brief and doubtful catalogue of Irish authorities, but mostly are individually indebted to himself for their very existence, and all of them for their lives, characters and events of their respective reigns." . . . "No less than forty-four kings prior to the fifth century have been lopped off from Boece's catalogue" by modern investigators; but whom Bellenden and Holinshed readily adopted with the rest of the chronicled errors which they implanted in popular belief." The article from which these remarks are drawn is impartial, for while it does not spare the chroniclers, it gives place to writers who have supported them; but Truth in such matters has taken a long time in order to prevail.

Similar opinions on the accuracy of the Scottish historians are expressed in Chalmers's *General Biographical Dictionary*, compiled in or about 1810. It is there said of Boethius that "he wrote his history in Latin: he is said to have been somewhat credulous, and much addicted to the belief in legendary stories. In this work there are a great many particulars not to be found in Fordun or any other writer now extant, and unless the authors which he pretends to have seen be hereafter discovered, he will continue to be suspected for the contriver of almost as many tales as Geoffrey of Monmouth." . . . "His history is written with elegance and vigour, but his fabulousness and credulity are justly blamed. His fabulousness, if he was the author of the fictions, is a fault for which no apology can be made; but his credulity may be excused in an age when all men were credulous. Learning was then rising in the world; but ages, so long accustomed to darkness, were too much dazzled with its light to see anything distinctly. The first race of scholars in the 15th century, and some time after, were for the most part learning to speak, rather than to think, and were therefore more studious of elegance than truth." The old epigram recorded by Leland the antiquary, more

than three hundred years ago, is still deservedly applicable to him. I take it from page 72 of the little volume, *Principum ac illustrium aliquot in Anglia virorum*, by John Leland, Londini, 1589:—

De Hectore Boethii.

Hectoris historici tot, quot, mendacia scripsit,
Si vis ut numerem, lector amice, tibi;
Me jubeas etiam fluctus numerare marinos,
Et liquidi stellas connumerare poli.

The history written by Boece was translated into the Scottish vernacular by John Bellenden, archdeacon of Moray, a distinguished scholar, by the command of the king, James V. of Scotland, and published at Edinburgh in 1536. It has been observed that this translation “is very far from being close, Bellenden taking to himself the liberty of augmenting and amending the history as he thought proper with a good deal of freedom, departing often from his author and sometimes also adding circumstances, which might not be known to Hector Boece.” Holinshed published a version in English, although it was not so translated by himself, and this one, his *Chronicles* was first published in 1587; he was not the sole author or compiler, but was assisted in the work by several other writers.

Another volume of the *Quarterly Review*, for July, 1873 (Vol. 135, p. 69), contains an article on “Celtic Scotland.” Though it bears heavily against the legends and early histories, no mention is made of the Coronation Stone. It speaks freely of “Scottish fable” and the “most intricate maze of fiction,” admitting that a “residuum of fact survives.” John Pinkerton, the “painstaking though acrid antiquary,” in 1789, calls Boece the “most egregious historical impostor that ever lived.”

These criticisms probably have operated in some degree to shake the Scottish belief; but so long as the *Chronicles* exist in print, so long also will they have the power to mislead. Holinshed is immortalized in two grand folio volumes, worthy of a permanent place in any library, as a work of curiosity. The criticisms require to be searched for, but the trouble of finding them has induced me thus to assemble them for handy reference.

Holinshed's work contains also the history of England and Ireland, so his fictions extend to both.

The alleged inscription now remains to be noticed. Dean Stanley inclines to think that it was actually engraven on the stone, although none is now visible, and (referring to Speed) he says: "It was one of those secular predictions of which the fulfilment cannot be questioned. The passage in Speed's *History of Great Britain*, folio edition 1627, page 912, as to the Coronation of the king [James I.] and queen at Westminster is as follows: "Where the antique Regall Chaire of Inthronation did blessedly receive, with the person of his Majesty, the full accomplishment of that Propheticall prediction of His coming to the Crowne, which antiquity hath recorded to have been thereon inscribed thus—

Ni fallat Fatum Scoti hunc quæcunq; locatum
Invenient Lapidem, regnare tenentur ibidem.

(and followed by this translation,)

If Fates goe right, this Stone, wher e're tis pight,
The Scot shall find, and there his Raigne assign'd."

Here a slight difference from Holinshed's version is to be noticed: in the first line the word "hunc" is inserted, meaning "this stone," implying that the inscription was actually engraved upon it, but of which in reality there is not now the faintest trace; the next word has the final syllable abbreviated as in Holinshed. In both versions each line is an hexameter verse: the inserted word does not alter the scanning of the Latin. Each line of the Latin, and also of the English, translation is a leonine verse, where words in the middle and the end of the lines are rhyming. This quaint form was much in vogue with monkish writers about the thirteenth century, and I venture to suggest that the couplet was composed when the stone was at Scone Abbey, rather than at any earlier period of the real or mythical history. As already mentioned, the so-called inscription was known to Fordun, writing about the year 1381. Did he compose it?

A new and unexpected light is cast on this tangled subject by a tract which no writer, so far as I can ascertain, has ever noticed with reference to the Coronation Stone. I found it recently when pursuing a

different matter of research in the library of the British Museum, where it is catalogued under "Charles II, king, etc."; its press mark is 8132. f. 2. It lends support to the imputed prophetic character of the couplet, which was familiar to the chronicle writers of the fourteenth and sixteenth centuries down to 1536, and consequently before the birth of James VI of Scotland in 1566. The tract in question is dated more than a century later: it bears this title—"A brief account of His Sacred Majestie's descent in a true Line from king Ethodius the First who began to reign Anno Christi 162. Written in a letter to a friend Anno 1681." 55 pages folio. The purpose of the anonymous writer is to establish the descent of Charles II king of England, grandson of James I, and through him upwards to Ethodius I, who is said to have been the twenty-fifth king of Scotland at the early period of the year 162 A.D. He alleges that the prophecy is fulfilled; and enforces the allegation by printing the couplet as a chronogram of the birth-year of James I. At page 28 of the tract the author writes:—

"Be sure his authority was from heaven. For what fanatick can have a forehead to refuse, that the Spirit of God assisted the penman of—

NI FAL LAT FATVM SCOTI QVO CVNQ: LOCATVM
INVENT LAPIDEM REGNARE TENENTVR IBIDEM. } = 5537

where the four M's, the two D's, three C's four L's, six visible V's, with seven I's, by a strange numerical prophesie, holds to the year of the world 5537, in which was born king James the sixth, who found the fatal Chair at Westminster before him."

4 M.	=	4000
2 D.	=	1000
3 C.	=	300
4 L.	=	200
6 V.	=	30
7 I.	=	7
		<hr/>
		5537

The counting up is placed in the margin for the sake of perspicuity. Observe that every letter which is a numeral is brought into the reckoning. In quoting the couplet I have already drawn attention to the fact that the word "quocunque" is cut short, a very usual process with the final syllable "que," exercised by the older printers as one way to save type. In very many chronograms the syllable is similarly treated in order to exclude a redundant numeral letter without

infringing the printer's custom. Observe that the author speaks of but "six visible V's."

The author does not explain by what method of chronology he arrives at the particular date. It appears, however, that he has taken one of the numerous reckonings proposed by early calculators for settling a starting date for the Christian era, in continuity with the vague chronology of Mosaic and Jewish narratives, namely that proposed by one known as Anastasius some time in the sixth century A.D.; which was by commencing the Christian era at the Crucifixion of Christ instead of His birth, or 33 years later than His birth-year finally adopted.

The author would take the Mundane era, the period elapsed from the Creation of the world as 4004 years before the birth of Christ. That however, it must be observed, is a purely arbitrary epoch; but it has won its way, out of a host of others, into general acceptance.¹ His reckoning would stand thus:

The years elapsed from the Creation to the Birth of Christ	4004
Add the usually expressed Annus Domini of the birth of James VI of Scotland (about which there is no question)	1566
less the difference of years above stated	33
	<hr/> 1533
The author's "year of the world" now appears as expressed by the chronogram...	5537

One can fancy him triumphantly exclaiming, "Behold, here is another evidence of the fulfilment of the prophecy!" James VI, king of Scotland, born A.D. 1566, was crowned king of England where the Stone of Destiny was waiting for him. Whatever may be the worth of the couplet in its plain or chronogram form, it certainly is not a prediction composed after the event.

From that period authentic history traces the descent of the crown from the House of Stuart into the House of Hanover, without going outside the Scottish lineage.

¹ One authority, *Handy-book of Rules and Tables for verifying dates with the Christian Era*, by John J. Bond, 1869, page 269, says there are as many as 140 different dates given for the Mundane Era. Another authority,

the article "Chronology" in the latest (the ninth) edition of the *Encyclopædia Britannica*, says there are upwards of 200 different reckonings of the same epoch.

The direct descent ceased with Queen Anne in 1714, all her children having died in her lifetime. The root was regained in Elizabeth, the daughter of James I. She was the wife of Frederick V, duke of Bavaria, count palatine of the Rhine, and the elected, but most unfortunate, king of Bohemia. Her daughter Sophia married Ernest Augustus, duke of Brunswick and elector of Hanover, and on her descendants (being Protestants) the crown of England was settled by Parliament in 1701,¹ when all the children of Queen Anne had died. Her son, George Lewis, succeeded Anne, and was crowned king of Great Britain in 1714 as George I, and he was the near ancestor of our present Royal Family, whose several coronations, six in number, on the stone of destiny are facts of recent history. There was an interval of 306 years, of what may be called inactive influence of that stone, between its removal to Westminster and the coronation of James I; but having regard to the numerous descendants of Queen Victoria, we feel that the time has not arrived for suggesting that the active influence of the stone in favour of the "Scottish Reign" is yet exhausted.

This essay does not tell all the story of the stone. More particulars may be read in a little work *The Coronation Stone, and England's Interest in It*, by Mrs. G. Albert Rogers, "the fifth edition revised and corrected," published about 1889, 128 pages. It is her endeavour to prove that the stone at Westminster is the identical one that was Jacob's pillow at Bethel, and to attest in consequence Queen Victoria's right to reign. The work is worthy of perusal. See also a work published by the "Palestine Exploration Committee," *The Bible and Modern Discoveries*, by H. A. Harper, 4th Edition, 1891. At pp. 29, 407, the "ridiculous theory" of Jacob's stone is commented on. The subject was treated of, as to other points, in the *Archæological Journal* for 1856,

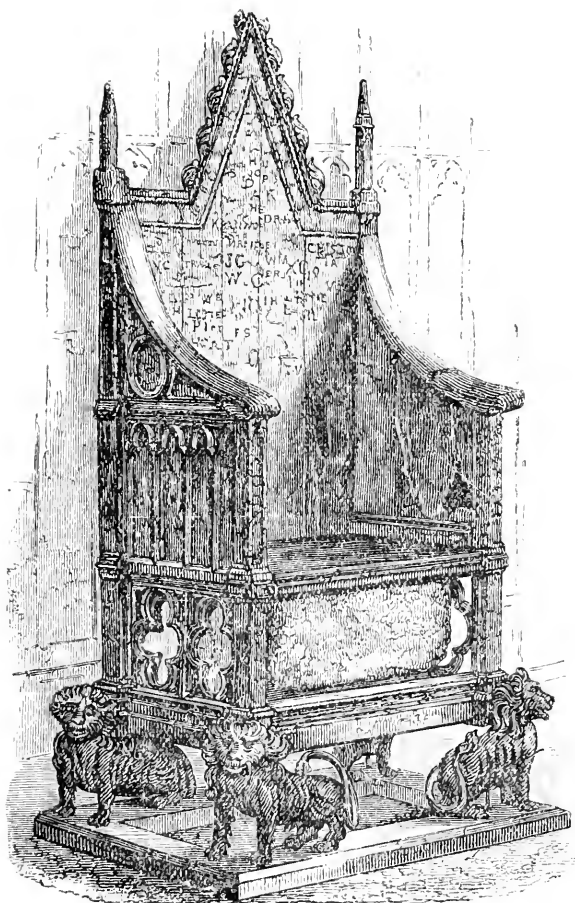
¹ By 1 & 2 Will. III, c. 2, known as the Act of Settlement. In the *Quarterly Review* for September, 1841, Vol. 68, p. 435, it is stated that the descendants of the queen of Bohemia's daughter, the Electress Sophia of Hanover are almost innumerable; and that there is

a moral impossibility of the failure of a Protestant heir in virtue of the Act of Settlement. Then follows a surprisingly long list of those to whom the succession would pass, next to the issue of George III.

Vol. XIII, p. 245, in a paper entitled "King Edward's Spoliations in Scotland in 1296. The Coronation Stone: Original and Unpublished Evidence." As these authorities are easy of access I do not quote from them in these remarks.

I have failed to find any recognition of the curious tract with the chronogram in the several publications of the Bannatyne Club of Edinburgh, the Maitland Club of Glasgow, the Spalding Club of Aberdeen, the Abbotsford Club, the Grampian Club, the Roxburghe Club, and some other more scattered collections devoted to the elucidation of Scottish history. To these I may add the *Edinburgh Review*.

In 1887 it was reported to the Society of Antiquaries that the Coronation Chair had been tampered with during the preparations for the Queen's Jubilee Thanksgiving Service on June 21 in Westminster Abbey by covering the woodwork with a dark brown "oak stain," thereby effectually defacing and obliterating the remains of the decoration done by Master Walter the painter by order of King Edward I, about the year 1300. The circumstance was questioned in the House of Commons on 24th June, 1887, when the minister replied that the chair "had not been in any way stained or disfigured," etc. Shortly afterwards a workman was observed by my informant to be very busy with detergents and rough textile stuff rubbing and scraping the chair, apparently to remove something from its surface. The question was repeated in the House of Commons on 5th July, 1887, when the minister replied, "It is true that the chair was slightly darkened; that he was in error in what he had before said; but what had been done was easily undone, and that the chair was now in substance exactly as it was before." The answer to that extent seemed satisfactory: the brown varnish had been removed; but a dark stain was still seen where it had been put on, and some fear existed that it would become darker. See the *Proceedings of the Society of Antiquaries*, Second Series, Vol. XI, pp. 427, 438. See also the *Times* newspaper, 25th June, 1887, page 11, and 6th July, 1887, page 7. The chair is made of oak wood, and it is not doubted that it is the one made by order of Edward I. It is now defaced



THE CORONATION CHAIR, WESTMINSTER ABBEY.

(From Litchfield's "Illustrated History of Furniture.")

by names and initials cut in the wood by Westminster schoolboys and others in years past, when it was not protected by an iron bar as at present, and was less carefully watched than at this period. The lions at the base were gilt for the occasion of the jubilee, and they still wear the same golden surface. The stone is open to view, and, as is stated by Mr. Burges, there is a rectangular groove of 1 foot 2 inches by 9 inches on the upper surface which may have received a metal plate with the inscription engraved upon it. The present appearance of the stone and chair is represented in the illustration.¹

Some further notice of the Chair is met with in *Gleanings from Westminster Abbey*, by G. G. Scott, Edition 1863, in a chapter therein by the late William Burges, containing *inter alia* two engraved illustrations, with an account of the payments made to Master Walter for decorating the chair, and a description of the same; also in a little work, *Regal Records, or a Chronicle of the Coronations of Queens Regnant of England*, by J. R. Planché, F.S.A., 1838; where the stone and chair are described and the legend alluded to. The Society of Antiquaries is in possession of drawings made in 1863 of the decoration of the chair: these were sent for the minister's inspection when the question was raised in the House of Commons, to show the condition of the same before the affair of the "brown varnish."

APPENDIX.

The following extracts, addressed both to the antiquary and the geologist, bear upon the question, and perhaps settle it, "From what country did the Coronation Stone originally come?"—

I. In Dean Stanley's *Memorials of Westminster Abbey*, 3rd Edition, pp. 61 etc., the following passages occur (his narrative being condensed from Holinshed's *Chronicle*, and other sources): "The stony pillow of Jacob was transported to Egypt and other places . . . it was thrown on the seashore of Ireland as an anchor; or, (for the

¹ The Institute is indebted to Mr. F. Litchfield for permission to make use of the accompanying illustration, which

originally appeared in his work *The History of Furniture*, published (3rd Edition) 1893.

legend varies at this point) an anchor which was cast out, in consequence of a rising storm, pulled up the stone from the bottom of the sea. On the sacred Hill of Tara it became the "Stone of Destiny." On it the kings of Ireland were placed. If the chief was a true successor the stone was silent; if a pretender it groaned aloud as with thunder. At this point where the legend begins to pass into history, the voice of national discord begins to make itself heard. . . . Fergus the founder of the Scottish Monarchy bears the sacred stone across the sea from Ireland to Dunstaffnage in Scotland. . . . At Scone it assumes an unquestionable historical position. . . . Wherever else it may have strayed, there need be no question, at least, of its Scottish origin . . . from the sandstone of the western coasts; . . . on this precious relic Edward I. fixed his hold. . . . The Scots made many unsuccessful attempts to recover it. . . . In Westminster Abbey, in spite of treaties and negotiations, it remained and still remains.

At page 587 Stanley gives at full length a copy of a letter from the late Joseph Robertson of the Register House, Edinburgh, July 7, 1866, "in answer to some questions arising out of a long conversation in 1864." It begins thus:—We have a few Scottish Chronicles, written at various periods from the tenth to the middle or latter part of the thirteenth century; but in no one of these is there notice of the Stone of Scone. Their silence is remarkable, as although they are for the most part brief, they mention things of less mark. They show, at the same time, that at least as early as A.D. 906, Scone was a royal city, the meeting place of a national council or assembly, and that Scottish kings were crowned there, "*super Cathedram Regalem lapideam*," as in one of the chronicles about the year 1100. . . . So far as I see at this moment the oldest writer who tells the legend of the Royal Stone is William of Rishanger, who appears to have lived until after A.D. 1327; he describes the coronation in 1292 of king John Balliol at Scone, "*Collocatus super lapidem Regalem*." . . . Fordun is the next writer; he was alive in 1386; he tells two stories about it, one that it was brought from Spain to Ireland, and from thence to Scotland; the other that it was dragged up from the bottom of the sea, along with the anchor of a ship, etc. Both stories speak of the stone as of marble hewn into the form of a chair. (Other versions of the legend are quoted.) . . .

Andrew of Wyntoun, prior of St. Serf's Inch in Lochleven, wrote about the year 1424 a *Metrical Chronicle of Scotland*, remarkable for the fidelity with which it follows the more ancient records. His version of the legend of the Stone of Scone is, that a king of Spain, the father of Simon Brek, gave to his son the King's Stone of Spain—"a gret Stane that fore this Kyngis sete was made"—and bade him to take it to Ireland:—

And wyn that land and occupy,
And halde that Stane perpetually,
And make it his sege Stane
As thai of Spayne did of it ane.

Passing over other quotations given by Mr. Robertson, he says that Hector Boece was a weak and credulous writer, who begins his legend of the Stone with Gathelus in Spain. . . . I need scarcely

say that the descent of the Scots from Scota and Gathelus is a pure fable invented, it would seem, about A.D. 1296. The Milesian dynasty of Ireland is equally mythical. But Fergus son of Ere really lived, and reigned as the first king of the Scots in North Britain or rather in that corner now called Argyll then called Dalriada. But instead of reigning before Christ, he reigned about 500 years after Christ. After disposing of the legends of the Stone having been the pillow of Jacob or of St. Columba, Mr. Robertson says, Let me add, that there appears some reason to suppose that there were two stones at Scone. (i) the Stone of Fate now at Westminster; (ii) a Stone Chair, in which it would seem the Stone of Fate was placed when kings were to be inaugurated. Nothing is more certain than that king Edward I carried the Stone of Fate to Westminster in 1296. Yet, in 1306 we read that king Robert Bruce was placed in the Royal Seat at Scone. So also king Robert II had been crowned and anointed at Scone, on 26 March, 1371 we have record of his sitting next day in the Royal Seat on the Moothill of Scone. We learn elsewhere that the Moothill was on the north side of the monastery of Scone outside the churchyard. This distinction between the Stone of Fate and the Stone Chair may explain away the difficulties which suggest themselves in the way of applying the descriptions of some of the Scottish Chronicles which I have quoted, to the oblong block of stone now at Westminster.

Here end the extracts from the letter.

II. In the same volume, at page 594, Dean Stanley gives a "Geological Account of the Coronation Stone, by Professor A. C. Ramsay, LL.D., F.R.S., Director of the Geological Survey of England, etc., etc., June 19, 1865:"—At the request of the Dean of Westminster, I joined a party for the purpose of examining the Coronation Stone in Westminster Abbey in June 1865. The following remarks are the result of my observations:—The Coronation Stone consists of a dull reddish or purplish sandstone, with a few small imbedded pebbles. One of these is of quartz, and two others of a dark material, the nature of which I was unable to ascertain. They may be Lydian stone. The rock is calcareous, and is of the kind that masons call freestone. Chisel marks are visible on one or more of its sides. A little mortar was in the sockets in which the iron rings lie, apparently not of very ancient date. To my eye the stone appears as if it had originally been prepared for building purposes, but had never been used.

It is very difficult to settle the geological formation to which any far-transported mass of stone may belong, especially when the history of the mass is somewhat vague in its earlier stages. The country around Scone is formed of Old Red Sandstone, and the tints of different portions of that formation are so various, that it is quite possible the Coronation Stone may have been derived from one of its strata. The country round Dunstaffnage also consists of Old Red Sandstone, reddish or purplish in hue, and much of it is conglomerate near Oban, Dunolly, and in other places.¹ In McCulloch's *Western Isles*

¹ The fossils peculiar to the Old Red Sandstone formation of Britain are fully described in the works of Lyell and Hugh Miller. Those of the New Red,

distinct from those of the Old Red, are likewise specially mentioned in the same, and in other geological works.

of Scotland, there is a note at p. 112, Vol. II, in which, writing of the Coronation Stone, he says, "The stone in question is a calcareous sandstone, exactly resembling that which forms the doorway of Dunstaffnage Castle." There can be little doubt that the Castle was built of the rocks of the neighbourhood, the sandstone strata of which are described, in a letter before me by my colleague, Mr. Geikie, as "dull reddish or purplish." This precisely agrees with the character of the Coronation Stone itself. M'Culloch does not mention how he ascertained that the stone in question (the Coronation Stone itself) is calcareous. His description, however, is correct. When the stone was placed on the table in the Abbey, the lower part of it was swept with a soft brush, and about as many grains of sand were thus detached from the stone as would cover a sixpence. Among these was a minute fragment of the stone itself. These were tested for me in Dr. Percy's laboratory by Mr. Ward, and found to be slightly calcareous. The red colouring-matter is peroxide of iron. There can be no doubt that the stone-dust brushed off the lower surface of the stone truly represents the matter of which the mass is composed. It was simply loosened by old age; and when examined with the magnifying glass, showed grains of quartz and a few small scales of mica, precisely similar to those observed in the Stone itself.

On the whole I incline to think (with M'Culloch) that the doorway of Dunstaffnage Castle may have been derived from the same parent rock, though as there are plenty of red sandstones in Ireland (from whence it is said to have been brought) it may be impossible to prove precisely its origin.

It is extremely improbable that the Stone has been derived from any of the rocks of the Hill of Tara, from whence it is said to have been transported to Scotland; for they, on the authority of Mr. Jukes, Director of the Geological Survey of Ireland, are of Carboniferous Age, and (as explained in one of the memoirs of the Irish survey) do not present the texture or red colour characteristic of the Coronation Stone.

Neither could it have been taken from the rocks of Iona, which, on the authority of my colleague Mr. Geikie, consist of "a flaggy micaceous grit or gneiss. There is no red sandstone on it, so far as I know; indeed, I am quite sure there is none."

That it belonged originally to the rocks round Bethel is equally unlikely, since, according to all credible reports, they are formed of strata of limestone.

The rocks of Egypt, so far as I know, consist chiefly of nummulitic limestone, of which the Great Pyramid is built; and though we know of crystalline rocks (such as syenite, etc.) in Egypt, I have never heard of any strata occurring there, similar to the red sandstone of the Coronation Stone.—Dean Stanley adds in a footnote: The conclusions from the above statements are as follows: 1. The stone is certainly from Scotland, probably from Seone. 2. Comparing the present size with the description of the Scottish chroniclers, "*una magna petra-pergrandis lapis*" and "rounded into the form of a chair," it would seem to have been reduced to meet the requirements of the new chair of Edward I., and hence the marks of chiselling on its surface. 3. The legend of its travels from the East seems to have been invented by Baldred Bisset, who was sent

by the Pope, A.D. 1300, to outbid the claims put forward by Edward I. for the dominion of England over Scotland through the alleged conquest by the Trojans. 4. The chair in which it was placed at Scone seems to have been left, and continued to be used for the coronation of Scottish sovereigns. Then follows a page of Latin verses on the stone written in the time of James I.

III. The geological position of the Egyptian sandstone seems to differ materially from that of the Scottish Old Red Sandstone; as explained by the following extracts from the *Journal of the Geological Society*, which present us with additional reason for belief that Egypt has no claim to be the origin of the Coronation Stone.

At p. 329 of Vol. IV of that journal for the year 1848 is a long paper by Lieut. Newbold on the geology of Egypt. The formation of what he calls the Lower Sandstone, so far as at present known, occupies but a small portion of the superficies of Egypt, and that near its southern limits, thence passing into Nubia. No fossils have hitherto been found in it, . . . about 25° 10' North, extending nearly to Syene . . . a distance of about 70 miles . . . where both it and the superincumbent limestone are overthrown by syenite and diorite. The sandstone here, near its junction with these rocks, passes into puddingstone and breccia. . . . Its lithological character varies from a loose granular aggregate of quartz, held together by a felspathic, calcareous or ferruginous cement, to a compact quartz rock. The pebbles in its interstratified breccias are usually of chert, flinty slate, agate or jasper, many of them evidently derived from the subjacent clay-slate. . . . This stone entered largely into the construction of the temples of Upper Egypt and its colossi, for which purpose it was usually quarried at Hadjar Silsilis, a little to the north of Syene, in immense blocks. The colossal statue of the Vocal Memnon was hewn from this rock, and many of the sphinxes at Carnac. Ehrenberg thought this sandstone formation identical with the Quader-sandstein of German geologists, and Russeger with the Keuper of the French geologists; but until further information is gained regarding it, we must hesitate to class it with any known European formation, though in mineral character, and its saliferous and gypsiferous nature it certainly resembles our New Red Sandstone.

At p. 334, the Upper or overlying sandstone formation is described. It overlies the limestone. . . . in patches stretching from the Mediterranean far into the Nubian and Lybian deserts, and into Abyssinia. . . . It varies from a compact crystalline rock of blood-red, white or yellow colour, to a loose quartzose grit and conglomerate, imbedding rounded and angular pebbles usually of a siliceous nature, viz. quartz, chert, jasper, etc. . . . The cement agglutinating the grit is usually siliceous and ferruginous, mixed with decayed felspar and sometimes lime. . . . Generally it has the character of a tertiary formation. . . . It has been used largely to form grindstones, and pavement for Cairo.

In Vol. XLIX, for the year 1893, it is remarked that the Nubian sandstone is of the cretaceous age . . . a littoral deposit . . . the waste of Archæan rocks.

In Vol. L of the *Journal*, for 1894, at p. 50, the subject is continued

in a paper by Captain Lyons in which it is remarked that, the Nubian sandstone varies much in colour and durability according to the amount of staining by oxides of iron and manganese, and the amount of cementing silica. . . . Wherever seen (by Captain Lyons) it is strongly suggestive of an estuarine deposit. It varies from a dark purple-red mass . . . to a white, soft, friable sandstone, containing fossil wood but no other fossils that he could discover. Professor Hull considered it to have been deposited within the waters of a vast inland lake. Captain Lyons considers it to be of eretaceous age, and not carboniferous so far as Egypt represents it.

In Vol. LII of the *Journal*, for 1896, at p. 311, are some further remarks on the Nubian sandstone "so largely used in the building of the temples, and which has wonderfully resisted the effects of time."

In the exhibition now (July, 1897) held at University College, London, of objects recently discovered in Egypt by Professor Flinders Petrie, is a "sandstone statue of Nefer-shem-em," obtained from a great heap of drift sand at El Kab. The material is of a lively red colour and very friable, probably of the Nubian sandstone formation. Had it been exposed in a wet climate, it would have decayed away long ago. This object belongs to the period of the fourth dynasty, the approximate date being 4,000 years before Christ.

Canon Tristram, in his works *The Land of Moab* and *The Land of Israel*, states that the Old Red Sandstone formation prevails in Moab on the eastern side of the Dead Sea, very different from the sandstone on the western side, which he says is of the New Red formation. This is but slender support to the suggestion that the Coronation Stone as Jacob's pillow came from any spot in that region. Bethel is a long way to the north-west of the Dead Sea. He also speaks of Pudding stone there. This last material is by no means rare. As we have seen, it is found in Egypt and Nubia; it is also familiar nearer home—in Hertfordshire, where it certainly is not of the Old Red formation.

The foregoing opinions of experienced observers and practical geologists, do not encourage a belief that the Coronation Stone is identical with any of the sandstones of Egypt, or that the Stone itself can take its origin from that Land of mysteries.

SOME SOCIAL COPTIC CUSTOMS.¹

By MARCUS SIMAIKA BEY.

The following is a brief account of the customs observed by the Copts, who are the direct descendants of the ancient Egyptians, on the occasions of weddings, christenings, mournings, etc.²

Some of these usages are very ancient, and date from pre-Christian times. After having been faithfully kept up for so many centuries, in spite of all the troubles and vicissitudes the country and the people have suffered from, some of these customs now tend gradually to disappear before the spread of education, especially amongst women, more particularly those customs which are foreign to the race, and which the Egyptians had to adopt in time of persecution from the Moslems.³

It is in compliance with a desire expressed by many English friends that the writer—who, belonging to one of the old conservative Coptic families, has been familiar with these customs since his childhood—has tried to give them a crystallized form before they are either given up and forgotten or modified beyond recognition.

Birth of a Child.

The Copts look upon children as the most valuable of God's gifts. In the highest as well as in the lowest

¹ Read at the Monthly Meeting of the Institute, July 7th, 1897, by Somers Clarke, F.S.A.

² When Egypt was conquered by the Arabs, Christianity was the religion of the whole country. It, however, began soon to give way to Mohamedanism because of the persecutions and disabilities inflicted on the Christians. Those of the Egyptians that remained true to their faith were distinguished from the others by retaining the name of Copt, which is derived from the Greek *Αιγυπτιος*, and means Egyptian. The apostates were called "Awlad Arab," children of the Arabs.

According to the census made this

year, the Copts number a little over 800,000. But the writer has every reason to believe that their real number is considerably greater; he knows personally several families who, through ignorance, fearing lest the Government in making the census should have for its object the imposition of new taxes, or obtaining data for the much-abhorred conscription, have not declared any of their male children.

³ About one-fifth of the pupils attending Government schools are Copts. They form the greater majority of pupils in the missionary schools, and have besides a large number of schools of their own, both for boys and girls.

home great is always the joy felt on the birth of one, especially if it is a boy. Both before and after the event the mother is made the object of the tenderest care. For a week after the birth the mother keeps her room, and is not allowed to do any work; if she is poor, her relatives or her neighbours come to her help quite willingly till the 40th day after the birth.

On the seventh day the child is generally given a name. When it is the first-born, during the day, a lunch is given to all the lady friends. To accustom the baby to unexpected sounds or shocks, a gong is sounded near its ears, and it is afterwards rocked in a sieve. Afterwards the mother, dressed all in white, carries the baby in her arms, and, escorted by the midwife, is taken in a sort of procession all over the house, preceded by all the little folks carrying candles and singing nursery songs; some of them also carry incense burners.

On this occasion the parents of the young mother make at home some sweets and cakes, called "Komaga," of which a portion is sent with a certain quantity of dried fruit, such as almonds, walnuts, cocoanuts, etc., to each family in connection with them.

In the evening a water bottle, covered with silk and adorned with diamond and gold ornaments, is placed in a shallow metal basin. Three wax candles are attached to the edge of the basin, and are given each a favourite name chosen by the family. These candles are then lighted, and that which lasts the longest gives its name to the child. Each guest present is expected to put a piece of money into the basin, and the collection is presented to the midwife in addition to what she receives from the father. The names used by the Copts furnish traces of all the nations which have successively dominated Egypt. Besides old Egyptian names, such as Hâr from Horus, Serapamoun from Serapis and Amon, there are Greek names, such as Theodorus (pronounced Tadrûs), Philotheos (pronounced Faltaûs), Roman names, Claudius (pronounced Ekladiûs), Persian names, Narouz; Arabic names are, of course, commonest. Now some begin to use English names, such as Henry, Jeffrey.

People of the old school believe that every person is connected with the star under which he or she was born.

Superstitious people have recourse to an astrologer for the choice of a name for a child, also to see whether the name of the bride-elect will agree with that of her future husband.

I was present a few months ago at a betrothal, when the uncle of the bride, a man of some position, insisted on the name of the maiden being changed because an astrologer whom he had consulted declared to him that unless that were done the pair will not be happy.

Baptism of a Child.

According to the rules of the Church, a male child should be baptized when forty, and a female when eighty days old. But this rule is not strictly adhered to. When a child is delicate, the baptism is sometimes put off for months.

The baptism always takes place in the church unless the child be dying, when it is celebrated at home. It is done by triple immersion in pure cold water mixed with a little consecrated oil.

Every child should have either a godfather or a godmother, who answers for him, and is considered by the Church as a parent. Starting from this idea, the Church does not allow a young man to marry the daughter of his godfather or godmother, she being considered as his sister.

After the triple immersion, the child is anointed with the chrism, which answers to confirmation in the Western Church, and the baby is given the communion.¹

Children receive a second name when baptized, usually that of the saint of the day unless the parents prefer the name of a favourite saint. For boys "Girgis" (George) and for girls "Maria" (Mary) or "Miriam" are very common names.

Choice of a Wife.

According to the old Coptic traditional customs which prevailed up to the present time, it belonged to the

¹ In the Coptic church communion is received in both kinds; in the cases of little children a drop of wine only is given.

parents to marry their children, both sons and daughters, to whomsoever they thought fit. The young people had practically no voice in the matter; in fact, matches were sometimes arranged long before the intended husband and wife became of age.¹ Some thirty years ago, fifteen years for the male and twelve for the female was considered a suitable age for marriage. Now, at least twenty for the man and sixteen for the girl are insisted upon before the licence for the celebration of the wedding is issued.²

So long as the two sexes were kept strenuously apart, and no mixing was ever allowed, things went on pretty smoothly³; but, with the spread of education, these customs had to be gradually relaxed, and as young people came across persons more to their liking than their mates there was a great deal of friction in families.

To remedy this situation, the Patriarch, who is the head of the Egyptian Church, was obliged to interfere, and he issued, two years ago, a circular to all clergy, 1st, reminding them that, it not being contrary to the canons of the Church, young people intending to marry should not only see but mix with each other, so as to know one another well; 2nd, calling upon them to ascertain this fact, and that both parties freely consent to the marriage before the ceremony is celebrated.⁴

Engagement.

As soon as the consent of two families has been obtained for the union of two young people, the young man sends to the maiden, with a priest, a gold or a diamond ring, which is called "El-Shabka" (the engagement ring), and a day is fixed for the betrothal ceremony.

¹ These customs still prevail in the country, where most families live in patriarchal fashion. The authority of the "Lord of the house," who holds the common purse, on all matters is undisputed.

² At present no priest can celebrate a wedding ceremony without a licence from the Patriarch or the Bishop of the Diocese.

³ This is one of the customs imposed on the Copts after losing their indepen-

dence. Before, Egyptian women had as much freedom as their European sisters.

⁴ The canons of the Church have not been changed since the Council of Nicea, but several practices contrary thereto have sprung up and obtained the sanction of long usage, such as the consecration of monks only as bishops, allowing male heirs double the share of female, the seclusion of women, etc. The first practice is based on Corinth. vii. 31 and 32; the two last are evidently due to Mohamedan influence.

Betrothal.

The betrothal ceremony, "Jepeniot," or the "Lord's Prayer," generally takes place soon after. In the evening of the fixed day, the groom, accompanied by a number of his relatives and friends and a priest, go to the maiden's house, where her relatives are assembled to receive them.

The priest opens the proceedings by reciting the Lord's Prayer, in which all persons present join. Then the priest delivers an appropriate speech, showing the antiquity of the ceremony, and alluding to the betrothal of Rebecca to Isaac.

The marriage contract is drawn up, and the dowry, which the bridegroom then pays, and the date of the wedding are therein mentioned. The priest and the most important people present sign the document, which is afterwards registered at the Bishop's offices. It is kept in the archives of the diocese, and in exchange a marriage licence is issued. At present there are printed forms for both these documents. The dowry varies in amount according to the pecuniary resources of the bridegroom. It is usually from £10 to £100. The bride's father generally contributes the same or double the sum paid, and the whole amount is spent in buying ornaments and on the trousseau.

After partaking of refreshments, supplied by the groom, the people separate.

When the date fixed for the wedding is a distant one, the young man is expected to send to his bride-elect from time to time gifts of flowers and fruits. If festivals such as Christmas or Easter intervene, he generally sends her a robe and some cakes and sweets.

Weddings.

Weddings are, as a rule, celebrated on the nights of Saturdays and Sundays.¹ The first is called the bride's

¹ Weddings are never celebrated during Lent or any of the Fasts kept by the Coptic church, except under very exceptional circumstances. Lent lasts 55 days. There are 3 other long fasts, the Apostles, from 30 to 45 days; the

Nativity, 30 days; the Virgins, 15 days, besides several minor ones. Although these fasts are now kept by very few people, they actually preclude marriage altogether for more than one-third of the year.

night. The ceremonies on this occasion take place at the bride's house.¹ In the course of the day the bride goes with her friends and relatives to a public bath, which is specially reserved for the party, and at night she is adorned and holds a sort of reception to which all relatives and friends are bidden. All the guests stay to dinner, and spend the night listening to singers, music, etc.²

The house is tastefully decorated with flowers and bunting, and it is brilliantly illuminated at night. The women generally occupy the upper stories, and the men the ground floor. Very often a large and lofty tent is erected for the men in the courtyard or garden, or even in the street, and the whole house is left to the women. The food is prepared by cooks especially engaged for the occasion, and all the china, plate, tents, and decorations are supplied by contractors called "Farrasheen."

Dinner is served on round metal trays about five feet in diameter, placed on stools. Each tray is placed on a central stool (Kûrsi) about 2 feet 6 inches high. Cane chairs are generally set around; they have come into use within the last 30 years. Before that time the stools used were about 1 foot 6 inches high, and the people eating used to sit cross-legged on cushions, carpets, or mats, according to their condition. About ten people can sit round on chairs comfortably. Every guest is provided with a napkin, a spoon, and a cake of bread that serves for a plate, but no forks or knives.³ They all eat out of the same dish, every one using his fingers, which he must wash both before sitting to table and after leaving it. There are usually from twelve to fifteen courses that are presented in succession, beginning with soup, then meats and vegetables, and lastly sweets and fruits.

As each dish is placed on the table the most important man present is pressed by the others to begin, which he does after some little hesitation. He takes delicately a morsel with the thumb and the index, the others follow-

¹ This is also commonly called the night of "Henna," because before the bride goes to bed henna is applied to the palms of her hands and the soles of her feet, so that the red colour it imparts may be quite fresh on the next day.

² The immoral dancing of the Almis is no longer allowed in the better families.

³ Only families of the higher classes are beginning to use forks and knives.

ing his example. After a few mouthfuls have been taken, the dish is removed on a sign from the important man, and another dish is presented, and so on till the end. When a priest is present, he takes precedence over all other people, whatever may be their rank. He begins by saying grace; then, taking a loaf, he blesses, then breaks it, and gives a small piece to each person present.

There is generally little conversation at table, and, therefore, the meal, notwithstanding the large number of courses, does not last more than half an hour. Several of these trays are set in the dining hall, and as soon as a set of guests had done, the trays are immediately changed, and another set of guests take their places, and so on till every one has had his dinner. In the weddings of the upper classes the trays are now covered with a tablecloth, which is changed, but in ordinary weddings the trays are simply wiped with a sponge, and the things are then replaced by fresh ones. A great deal of tact is used in asking the guests to the dining hall, and on the whole there is usually nothing to mar the cheerfulness that seldom lacks at such gatherings.

The groom does not put in an appearance at the bride's house on this night, but he sends a small deputation of his nearest relatives, and along with them a bouquet and a wax candle that must be as long as the bride is tall. This candle remains in the maiden's bedchamber lighted during the whole night.

In the afternoon of the second day, Sunday—called the bridegroom's night—the best man, "Shebeen,"¹ accompanied by two or three of the nearest relatives of the groom, go to fetch the bride, who moves with all her friends in a procession to her future home, preceded by a band of musicians. Some years ago these processions only moved at night, and were very effective. First came the band, preceded by torchbearers, then the men carrying each a candle in a bouquet, then the pages carrying incense burners and perfume bottles, walking backwards, with their face to the bride, then the bride leaning on the

¹ The Shebeen, or groom's man, always pays for the carriages hired for the conveyance of the bride and her party to the groom's house, and he tips the servants. The bride's father pre-

sents him with a gold or a silver cigarette case. In old time the bridegroom and the Shebeen were presented each with a costume.

arm of the best man, followed by the ladies, with the servants in the rear.¹

At present the bride and the ladies are conveyed to the bridegroom's house in close carriages, preceded by music, and only escorted by the best man and his assistants. On arriving at the house, a sheep or a calf is killed, care being taken that its blood shall flow on the threshold. Its flesh is given to the poor, and the bride is carried or helped up to the ladies' apartment by the best man. As the procession leaves the bride's maiden home, and as it enters the groom's house, it is sprinkled with salt and sometimes rose leaves, to prevent the effects of the evil eye.

Wedding Service.

After resting a little and partaking of some slight refreshments, the wedding or "crowning" ceremony is gone through.

This ceremony generally takes place in the house of the groom, but it may be celebrated in the church. A table is placed in the middle of one of the largest halls in the house, on which a copy of the Holy Gospels in a silver case is placed, surrounded by six silver crosses, to each of which three wax candles are fixed.² Two armchairs are set in front of the table for the accommodation of the couple to be married. The groom is robed in another room with a richly embroidered cope, and conducted in a procession preceded by the choir to the hall. Afterwards the bride, who is dressed up in a white garment adorned with orange blossoms, her face being covered with a thin gauze veil with a few diamond or gold ornaments, is fetched in the same manner.

The priest begins the service by saying in a clear voice three times: "We are assembled to solemnize the union of N. & X.," repeating after each announcement the Lord's Prayer, in which all present join inaudibly. Then the wedding service is gone through. After the prayer of thanksgiving several chapters, both from the Old and New Testaments, referring to marriage are read. Then the

¹ The Moslem Egyptians have retained many of these customs.

² The three candles fixed to the cross

in many of the Coptic church services and processions is a symbol of the Holy Trinity.

priest blesses the couple and explains to them their duties towards each other.

Towards the end of the ceremony, two crowns of gold are placed on their foreheads, they are made to exchange rings, and to join hands. Their heads are drawn close together, and are covered with an embroidered sash. They are besides bound with a ribbon as a symbol of the indissoluble character of marriage, and that they are no longer two but one.¹

In conclusion, the priest, addressing first the groom, says to him: "I deliver unto you your bride N., who is now your wife. You have at present more authority over her than her parents. You must always treat her with love and kindness, and never neglect any of her wants," etc., etc.

Then, turning to the bride, he says to her: "You have heard that according to the Scriptures your husband is your head as Christ is the head of the Church. That means that you should obey and respect him as Sarah obeyed Abraham and always addressed him, 'My master.' You must keep his house properly, and make his home always cheerful," etc., etc.

Finally, speaking to both, he says: "If you obey what you have heard, God will bless you as He has blessed Abraham and Sarah, Isaac and Rebecca," etc.

The service is concluded by some Coptic and Arabic hymns, and the women, who are never able to contain themselves, accompany the religious hymns by their "Zaghareet," a cry which they execute by moving the tongue in the mouth to manifest their joy.

After the ceremony the bride goes to the ladies' apartments and the bridegroom to the men's, to take their dinners and receive the congratulations of their friends, most of whom stay to dinner. An hour before midnight the bride and bridegroom retire, but the music is kept going through the greater part of the night.

On Monday the nearest relatives on both sides spend the day at the groom's house. The bride waits on them in person, and every guest presents her with some gift according to his means. This gift may be a diamond or a

¹ The crowns, as well as the cope, sash, etc., belong to the church.

gold ornament, or a sum of money, £1 to £10, receiving in return a handkerchief embroidered by the bride.

On the occasion of a wedding, it is the custom of all intimate friends to help by contributing something towards the coming fête. Some, for example, send a few sheep, another sends fowls, and a third, rice, sugar, coffee, candles, etc., etc.

The recipient generally makes a list of all the things received, and on a similar occasion sends something of the same value if he be of the same means, or of more or less value if a richer or a poorer man.

Mourning.

Of all the customs consecrated by long usage, none are more sacred in the eyes of the Copts, especially of the women, than those that are observed on the occasion of a death. It is customary to assemble the family in the house of the dying person. They watch all night by the bedside. Soon after the death the body is washed and placed in clean cloths. In the case of rich people the under garments are generally of pure flax that has been steeped in the River Jordan. The eyes are closed, a kerchief is tied round the face, passing under the chin to keep the mouth closed, the fingers are straightened, and the hands are laid across the breast.

As soon as a death occurs, and after that natural outburst of grief in which all members of the family, both men and women, join, the former withdraw to the rooms on the ground floor, leaving the upper stories to the women.

Like all bad news, that concerning a death spreads with rapidity, and soon all the friends and acquaintances of the family, both male and female, flock from all parts.

The men's and women's quarters present the most striking contrast. Whilst in the former all is decorum, the most frantic confusion conceivable reigns in the latter.

On entering, the men just touch the hands of the chief mourners, who sit together in one corner of the room, then they sit in regular rows; they hardly exchange a word with each other, but puff away at their cigarettes in silence as hard as they can.

The women behave differently. On reaching the door of the house they raise their voice in lamentation, and are answered by the women above with louder cries and wailings.

The scene that meets the eye in the women's apartments is most painful. Around the corpse, which is laid on a bed on the floor, and covered with a shawl, may be seen the women of the family decked in their richest garments. Their hair is dishevelled and their hands besmeared with indigo. The hired singers, who never fail to come uninvited, beat their drums wildly, and, by word and gesture, excite these unhappy creatures till they are quite beside themselves. Like mad women they furiously beat their faces, tear their hair, and do not cease shrieking till they fall down from sheer exhaustion, to recommence again soon after. From time to time all the women in the rooms join in a tremendous cry.

This terrible scene goes on till the corpse is removed, and at this juncture the excitement of the women reaches its climax.

All efforts to prevent at least the attendance of the singers, both in Coptic and Mussulman mournings, have been fruitless. The Church, and even the Government, had to interfere; but in vain, the women still have their way. The only concessions obtained after many years of struggles have been that the women should no longer blacken their hands and faces and accompany the funeral to the cemeteries, where sometimes terrible scenes took place.

The use of drums and of funerary dances has also ceased in the best families of Cairo and Alexandria, and tends to disappear gradually in the other classes of the people.

At the funeral procession the corpse is carried in turn by the best friends of the deceased. After being enveloped in a shroud of silk or cotton (which must be white if the deceased be young), the body is placed in a wooden coffin. Rose water and other perfumes are poured on the body, which is also strewn with flowers. After the service the lid of the coffin, which is ornamented with a large cross, is nailed before it is buried. The Mohamedans have no coffins: a bier is used for the conveyance of the bodies to the cemeteries.

The funeral procession does not differ much from that of Europeans. It marches in the following order :—First the choir boys carrying flags, and preceded by the sexton bearing a large silver gilt cross, then the priests, then the bier, followed by the chief mourners, and behind them their relatives and friends. After the service, which always takes place in the church, the corpse is buried.¹ All that can afford it have family vaults, with a courtyard and two or three rooms for the accommodation of the family when they go to visit the dead.

It is only after the corpse has been buried that the people in the house take some food ; it is supplied on the first and second days by their relatives. For three days the women in the upper storey, and the men on the ground floor, receive their friends. The women of the family wear their most magnificent clothes, whatever may be their colour, for the first three days. From the fourth day, and for one whole year, and sometimes much longer, both men and women wear black to indicate that they are in mourning.

In the house of the deceased all the furniture is covered with black. Some people put the carpets upside down, break the looking glasses, and commit great havoc. The women continue their wailings to the accompaniment of the songs of the hired mourners, in which they celebrate the good qualities of the departed, and his exploits, real or imaginary. On the third day a priest comes to the house, according to the women to dismiss the spirit of the deceased, which is believed to hover about the place till then, but in reality to bless the food before it is given to the poor, and to calm the minds of the people of the house by sprinkling all the rooms with holy water.

For forty days after the event the women of the house cry and wail every day two or three times, and the mourning continues one whole year. During this year the women resume the wailing and crying on every great festival, such as Christmas, New Year's Day, Easter, etc., etc.

The Copts believe that the soul is weighed by the

¹ In Upper Egypt it is still the custom to bury with the dead all their clothes and ornaments ; in Cairo only a

few favourite trinkets are not removed from the corpse.

Archangel Michael, who takes the place of Thoth. The uneducated believe that the souls are let loose from the places where they are confined awaiting the day of general judgment during the forty days succeeding Easter. On Whit Sunday prayers are offered for the dead in all the churches, and it is considered especially meritorious to feed the poor on that day. In the course of the week preceding that festival, the members of every family meet at a funeral meal, called "Sagda."

When one thinks of the resignation and fortitude, amounting almost to apathy, which the Copts, in common with most Orientals, show when any other calamity befalls them, such as the loss of their eyesight, or a limb, or their fortune, one wonders they give way to such despair on the loss of a near relative. This wonder even increases when you happen to know that during his lifetime the deceased was not the object of any special affection on the part of the disconsolate mourners. Sometimes quite the reverse.

Neither Christianity, with its pure morality and the consolation afforded by its beautiful teachings, nor Mohamedanism, with its fatalistic doctrines, seems to have been strong enough to sweep away in nineteen centuries the remains of Pagan habits. These heathen customs, along with many heathen beliefs, such as that according to which the soul remains at large for forty days after it leaves the body before it is called to judgment, its being then weighed in a scale, etc., still persistently linger amongst the Copts of the lower classes, and amongst all women, even of the upper class.

During the three days to which the male members of the family are condemned to inactivity, and which they spend listening to the songs of the hired mourners and the wailings of the women, the better educated have ample time to think of all these unchristian and irrational practices. Being generally far better enlightened than the women, there are very few men that are not disgusted with these practices, and wish that they should be abandoned.

The men alone, even when backed by the Church and by prohibitive laws passed by the Government, have not been able to effect any change worth mentioning, as has

been stated. But a new and strong element is coming to their help. Most young women, notwithstanding their limited education, find these customs senseless and absurd, and they rebel against them. So long as the elder women are mistresses of the situation, little or nothing can be done, but before thirty years have elapsed, most of these customs will be matters of the past.

THE TREATMENT OF OUR CATHEDRAL CHURCHES IN
THE VICTORIAN AGE, BEING THE OPENING AD-
DRESS OF THE ARCHITECTURAL SECTION AT
DORCHESTER.¹

By The Rev. J. CHARLES COX, LL.D, F.S.A.

It is proposed in this address,² as president of the architectural section of the Institute, to adopt the bold course of taking a general and necessarily rapid survey of the treatment that our English cathedral churches have received during the sixty years of her Majesty's happy reign.

Time does not permit any introductory remarks beyond those of the briefest character, but it does not seem right either as an antiquary or a churchman to begin the attack, for an attack it is intended to be, without a short paragraph or two by way of preface.

It is readily admitted that the fabrics of our cathedral churches are for the most part in more substantial repair in 1897 than they were in 1837, or in 1867, from which year my own closer observation of them dates. But substantial repair may be secured at a very great cost to the history and charm and real worth of these venerable buildings. The contention is that these fabrics might have been equally well preserved without the shocking and irreparable destruction of much that is ancient, brimful of interest, and fragrant with the memories of the past. Many details, too, that have been excellently carried out, as well as larger works of a useful and unpretentious character, have been passed over in the following remarks, because the avowed object of this

¹ Read at Dorchester, August 6th, 1897.

² In the preparation of this address, use has been made of the several volumes of Murray's excellent handbooks to our cathedral churches, as well as the works of Britton and Winkle. Monographs on the different churches have also been consulted, as well as reports and articles in the publications of our respective provincial archæolo-

gical societies. With all these cathedral churches, save Carlisle and Chichester, I am acquainted, and of several I have an intimate and close knowledge; but in venturing on my remarks and criticisms I am much indebted to a few friends of great antiquarian knowledge or tried architectural experience, foremost among whom it is a pleasure to mention Mr. W. H. St. John Hope and Mr. J. T. Mickethwaite.

address is the exposure of the grievous faults of a pernicious and irresponsible system.

Justice and a sense of religion also demand that it should be frankly and thankfully admitted, at all events by all of us who are churchmen, that the condition of our cathedral services and their reverent rendering, and more especially the revival in so large a number of the daily offering of the Holy Eucharist, are in most happy and wonderful contrast in 1897 to what was customary in 1837. For all this we devoutly say *Laus Deo!*

The cathedral church appeals to us not merely as an ancient and majestic fabric which has claims upon the regards of all who can derive gratification from the contemplation of the achievements of human skill and art through successive generations of our forefathers, but also as the venerable and beautiful mother of our Faith—the mother of all the parish churches of the ancient widespread diocese around her feet. For these early monuments of ancestral piety tell us of the first days of the planting of the Cross, whence radiated, as from some great missionary centre, the converting knowledge to the valley settlements or the hamlets of the plain. The cathedral church, and its community life, is, in its very essence, something older and more venerable than the parish church with its more isolated action.

It will be noticed, as each old cathedral church of our two provinces is brought before us in rapid survey, that two factors are mainly responsible for the mischievous treatment and spoiling of the interior of our minsters during the latter half of Victoria's reign. These are, firstly, the playing at parish church with the whole of the cathedral (combined with the idea of rendering it a great preaching-house), and hence endeavouring to obliterate the proper division between quire and nave; and, secondly, an undue giving way to the rage for gigantic organ effects, an idea involving music-hall arrangements, where everything has to give way to the pervading influence of sound.

The great church of CANTERBURY has been a grievous sufferer during this century at the hands of reckless, ignorant, or ill-instructed restorers. Some of their more prominent works may be mentioned.

In 1840, one of the distinguishing features of the church of the first Norman archbishop—the north-west, or Lanfranc's tower—was destroyed by Mr. Austin because it did not match with its fellow. There was no necessity for this modern tower; it is said that gunpowder had to be used to get rid of its Norman predecessor. The greater part of the stone work of the west front and of the south porch is also unnecessarily modern.

When the quire was originally completed by Prior Conrad, the high altar stood isolated, without any reredos. Behind it, to the east, was placed the ancient patriarchal chair of Purbeck marble, assigned to St. Augustine. This was the true position for the metropolitan chair, as still can be seen in several early Continental churches.

In Charles II time the quire was stalled throughout with beautiful Renaissance work, and an elaborate altarpiece with a stately baldichino was placed behind the Holy Table. The fine appearance of this work can be judged from a good plate in Dart's volume on the cathedral church of Canterbury, published in 1726. The altar screen was removed about 1870, and a poor reredos "imitated from the screen-work of the Lady chapel in the crypt" erected in its place. The altar was moved to the top of the steps, thereby displacing the ancient archiepiscopal chair from the highly interesting position that it had occupied since the days of Anselm.

The beautiful canopy work over the side stalls also disappeared. The stalls themselves were at a still later date replaced by the usual Scottian Gothic; but by great good fortune some of the majestic Caroline woodwork still remains at the back of the returned stalls, as an evidence of the once sumptuous fittings of the seventeenth century quire.

A handsome Corinthian throne, carved by Grinling Gibbons, and presented by Archbishop Tenison in 1704, was replaced by a tall stone canopy of debased Gothic, the gift of Archbishop Howley. The 1704 throne now stands unmeaningly in the further south transept.

In 1872 a fire took place which destroyed much of the roof of the quire and necessitated its restoration.

Mr. Pearson's late restoration of the chapel of St.

Anselm is in some respects most unhappy. The vault of the apse has been skinned of its plaster, the rough Kentish rag of which it is composed being carefully scraped and picked out with dark mortar. If that learned prelate, or those who erected his memorial chapel, could but revisit the scenes of their earthly career, nothing would probably fill them with more amused amazement than to find the ridiculous way in which two or three of our leading architects insist in exposing that which was meant to be covered up. We wonder sometimes if Messrs. Pearson, Blomfield, and Co. thus treat the walls of their own residentiary houses?

Still more recently has Sir A. W. Blomfield tampered with the crypt. Members of the Institute who had the good fortune to attend last year's meeting at Canterbury will remember how Mr. St. John Hope pointed out the wanton destruction of the walls that enclosed the vestry behind the altar of our Lady Undercroft; the alteration of the old levels and the substitution of a floor level that had never existed at any previous period; and the removal of the earth from the apsidal portion, whereby the proper proportions of the screen work and tombs had been nullified. Since the Canterbury visit of the Institute, more mischief has been done in repairing the Early English portions of the crypt; the remains of the stone benches against the wall, for the guardians of the tomb of St. Thomas, have been taken away.

This present summer has seen a yet further "restoration" from the hands of Sir Arthur Blomfield. In this case the Chapter House has passed through the mill. The roof required repair and some of the masonry about the windows, and that was all. But what has happened? New stone work has been inserted to supply every missing chip and flaw, or sign of its six centuries of age; the marble work has been repolished; every atom of the old plastering and decoration has been stripped, to be reproduced in nineteenth century imitation; and the beautiful and unique wooden ceiling made new. The chapter house is now bright and garish, and new and clean after the smartest of fashions, but more fitting to be the vestibule of Madame Tussaud's Waxworks than the conference hall

of the assembled chapter pertaining to the primatial see of our ancient church. We ask, with confidence, whether any one on entering this newly-decorated building, unaware of historic facts, could have the dimmest notion that in its main features it had stood for six centuries? And this is the proper test to which to put any restoration of an ancient fabric. If a restored building loses all trace of antiquity, the restoration is utterly false in its first principles. A clever Chinaman, at that rate, could not be beaten at church restoration, for he always excels in the production of an accurate but dull and vapid copy.

Recent events, such as the holding of the great Pan Anglican conference, have focussed our attention on the metropolitan church of Canterbury; so it is just as well that something should be said with emphasis by way of repudiating all share in the gush of vulgar praise over the tinsel decoration of this spoilt chapter house, so appropriately opened by a play-actor. Adapting good words, written originally of that sorry changeling, the restored Temple church, it may be said—the show is not the mediæval chapter-house of Canterbury, but a smart, meretricious overlay, in which historic interest and workmen's sympathy are wholly wanting. Human nature, save its vulgar side, is banished from the place; it has no memories nor any aspirations, but is just the sordid and prosaic fashion of the day.

With regard to Wren's masterpiece of St. PAUL'S, notwithstanding the just pride that all churchmen take in the present continuous use of all parts of this great church for its holy purposes, there is not a little which gives just cause for regret in the change and alteration of its fittings.

The destruction of Wren's organ screen ought never to have been permitted. However much it may be pleaded that the usual presence of a congregation under the dome, whilst the quire offices are being sung, justifies the change, the whole principle and *raison d'être* of a cathedral establishment, with its round of offices in their quasi-private chapel, is thereby nullified. Admirable as it is, from every point of view, to give opportunity for all who wish it to join in the daily mass or matins or evensong, in this great central seat of England's worship, the true course to have taken would have been to leave the quire

alone, and to place a fine altar for general worship beneath the dome. Such a course was ably advocated by Messrs. Micklethwaite and Somers Clarke, about a quarter of a century ago, in the pages of the *Sacristy*.

It will be remembered that one of the last feeble waves of a happily moribund Puritanism broke in scattered spray, a few years back, round this cathedral church in consequence of a small statue of Our Lady and the Holy Child finding a subordinate place in the ornamentation of the big erection then placed behind the high altar. Many a man of taste and judgment, who disliked this new erection, then held his peace for fear of being supposed to be in the least degree sympathetic with an ignorant Protestant attack. But it is well that it should be stated, from time to time, that this enriched wall, mistakenly spoken of as a reredos, stretching across in front of the apse, is quite out of place, destroys much of the presbytery that might be otherwise available for congregational purposes, and (as was seen at the recent enthronement of Bishop Creighton) proves singularly inconvenient at any great function by materially dwarfing the available space.

Another recent blunder is the moving of the font from its original position under one of the arches of the nave, and turning a chapel on the south side of the nave, formerly used as the consistory court, into a baptistry. Our English use is, and always should be, that the Sacrament of Holy Baptism should be administered before the congregation, and not made a hole-and-corner affair for a select few.

The noble cathedral church of WINCHESTER, giving evidence in its fabric of the work of a series of bishops extending over a period of five centuries, has happily been less mutilated than most of its fellows during the present reign. The west front was carefully restored between 1858 and 1863, when little harm was done, and much decay arrested. The church has not however passed scatheless through the storm of ruthless clearing for organ extensions. The chapel of Our Lady of Pity, on the north side of the quire crossing, was partly destroyed not many years ago for the convenience of an enlarged organ.

The quire screen, a good design of Inigo Jones, was removed early in the reign, and replaced by a stone screen of Mr. Garbett's. This screen has, in its turn, now been removed, to pander to the "unbroken vista" notion, the returned stalls only being left to form the separation between the nave and quire. The backs, however, of even these stalls were taken out; but the canons, finding their natural protection gone, and not being able to withstand the draughts, were actually compelled to glaze these foolishly made apertures. The side screens of the presbytery have also been glazed with plate glass!

With regard to reckless monument shifting, Winchester affords a single but striking example. Up to September, 1869, a plain coped tomb of Purbeck marble stood in the centre line of the quire, 15 feet westward of the lowest step of the high altar. The tomb was popularly supposed to be that of William Rufus. Its contents were examined in 1869, and there is practically no doubt whatever, on all grounds, that it is not the tomb of Rufus, but of his nephew—that powerful prelate Henry de Blois, who was Bishop of Winchester from 1129 to 1131. The tomb was removed about 100 feet eastward from the presbytery and placed on the site of the shrine of St. Swithun. Dean Kitchin recently brought back the tomb to the quire; but instead of restoring it to its old place, where it had remained for seven centuries, he caused it to be placed between the stalls (under the mistaken notion that it was the tomb of William Rufus), where it seriously blocks the gangway.

The cathedral church of Ely, the longest Gothic church in Christendom, contains noble examples of every style—from early Norman to late Perpendicular. The chroniclers of the abbey having recorded the exact date of nearly every portion of the fabric, this church is of the highest value and interest to the student and lover of architecture.

Dean Peacock was the first to set on foot any general scheme for the repair and decoration of the great church.

The quire of the monks at Ely stood beneath the octagon and extended to the second pier of the nave, terminating in a Norman stone screen. This arrange-

ment continued till 1770, when the screen was demolished, and the quire removed to the six eastern bays of the cathedral. At the general restoration by Sir Gilbert Scott, begun in 1862, the quire arrangement was again altered, an oak screen with brass gates being placed at the eastern arch of the octagon. The restorer, having apparently no idea of the true use of a cathedral church, made the screen "sufficiently light and open to permit the use of the octagon, as well as of the choir, during service."

The so-called restoration of the coloured decorations of the vaulting of the octagon was done in 1879. This destroyed the original delicate decorative work.

One of the most curious incidents of the restoration was the polishing and cleaning up and renovating of the quire half of the effigies between the quire and the quire aisles, and the leaving of the half on the aisle side in their decayed condition, reminding the observer of the advertisements of hair restorers, representing a head grey and thinly covered on one side of the parting, but thick and glossy on the other! The old couplet, slightly amended, may appropriately be applied to this quaintly mean and deceptive method of effigy restoration:—

"They brightened up the monuments within the ancient abbey,
But, thinking to deceive the Lord, they left the aisle sides shabby."

The great Early English church of LINCOLN in its noble situation has fared better at the hands of the Victorian restorers than its equally grandly placed sister of Durham; but this is only qualified praise, for the exceeding newness and smug evenness to which some of the parts have been reduced is much to be reprobated. This is particularly noticeable in the repaved and smoothed over Chapter House, the entrance to which has been completely though cleverly falsified.

Mr. Pearson has committed the inexcusable blunder, after the same fashion as at Canterbury, of picking off all the original plaster from the vaulting of the quire, and pointing it up with dark mortar.

The same architect proposed a few years ago to pull down the admirable Wren library and north walk of the cloisters, and to reproduce his notion of what early

Decorated work should be. He obtained the sanction of the Chapter, but happily the protests of the Society of Antiquaries and of other bodies and individuals were so strong and sustained that this good and historic work of the seventeenth century was spared. He was permitted, however, to work his will in all the rest of the cloisters.

Saving the roof, the exquisite quire, together with its fittings, has fortunately been left almost intact; but Lincoln Minster being the first big church to adopt gas, somewhere in the "forties," discarded the beautiful double row of charming little brass candle-sockets, which were given to the church in 1660.

The triple-spired cathedral church of LICHFIELD suffered terrible things at the hands of Wyatt, who in 1788 began to maltreat the whole fabric on similar lines to those named under Salisbury and Hereford. He moved the high altar to the further end of the long Lady-chapel, and made the whole place snug for canons and their wives and retainers by walling up the arcades of the quire, and closing the eastern tower-arch with a glass screen. Everywhere he patched with Roman cement, chopping off sculpture and twisting in wire and tarred rope to make it hold. He was specially lavish with this wretched stuff at the west front, supplying even a whole row of kingly figures, grotesquely modelled in cement upon the old cores.

The south side of the nave was refaced in 1842, by Sydney Smirke.

The quire arches were opened out in 1856, and in 1860 the building was placed in the hands of Sir Gilbert Scott. From that time to the present there has been but little rest for the fabric, the restoring works of Sir Gilbert Scott and afterwards of his son Mr. J. O. Scott being almost invariably in progress. Much of the stonework had sadly perished, and much of it undoubtedly required renewing. Nor can anyone be blamed for getting rid of the Wyatt enormities. The reproductions, too, of that which he had recklessly smashed up, such as the lovely canopies round the Lady-chapel arcade, were in many instances beautifully accomplished.

The least satisfactory part of Sir Gilbert's restoration was the practical abolition of a quire by inserting in the

eastern arch under the central tower a light screen of metal bedizened with imitation fruit and other ornaments. The great organ screen of Wyatt's re-erection was not satisfactory, but at all events he did not abolish the whole notion of cathedral quire offices in the way the Victorian architect thought well to do. By pandering to the idea of one great quasi-parish church, for congregational use, Sir Gilbert upset the true idea of cathedral worship such as had more or less prevailed in that fabric ever since its first foundation. Even the returned stalls were done away with; but as though half ashamed of the completeness of the transformation, the dean and precentor's stalls are respectively placed askew, so that the occupants look neither east nor across the quire.

A good quire screen or pulpitum is the manifest need of this beautiful church, and with the happier trend of church and devotional feeling of these days, it is not rash to prophesy that that and an effective nave altar will be the main characteristics of the next restoration.

The fine restoration of the west front by Dean Bickersteth, begun in 1877 and carried out by Mr. J. O. Scott, and the supplying all the niches with figures is to be commended, for the ragged, unsightly mess of Wyatt's cracking cement, tumbling off in all directions, made new work absolutely imperative.

Early in 1892 the dean and chapter of Lichfield made a big appeal for £22,000 for what, by a complete misuse of the Queen's English, they dared to term "needful reparation." They did not get, and have not yet obtained, we are glad to think, anything like that sum, but, alas! they succeeded in gathering sufficient to do irreparable mischief. So little good work was done to our great churches at the Restoration, that it might have been thought that the Lichfield authorities would have been only too glad to preserve the excellent rebuilding and restoration of good Bishop Hacket begun in 1661. But, no; the Scottian rage for imitation lancet windows prevailed. The proposal was to modernise the north transept, to raise the nave roofs (though in most excellent repair) to "Early English pitch," and to otherwise modernise all round under the plea of getting back to the beauty of the thirteenth century. The dean and chapter

called in Mr. Pearson to comment on Mr. Scott's proposals, and needless to say he altogether blessed them.

The *Athenæum*, *Antiquary*, and *Builder* all raised earnest protests, as well as several of the Birmingham and local papers. On the motion of Sir John Evans, seconded by Sir J. C. Robinson, the Society of Antiquaries resolved, on December 1st, 1892, that it heard

“with great regret that considerable portions of the cathedral church of Lichfield, the work of Bishop Hacket after the sieges of the Great Rebellion, though substantial and well-looking, have been replaced by modern imitations of supposed thirteenth century work, thereby destroying the traces of one of the most remarkable epochs in the history of the Church of England. The Society is also informed that further destruction of good seventeenth century work is in contemplation, and ventures to earnestly urge the dean and chapter of Lichfield not to permit any such destruction to take place.”

The dean curtly and impetuously attempted to deny the propositions contained in this resolution; but after listening to the defence of Mr. J. O. Scott, delivered *viva voce* on January 12th, 1893, the Society unanimously re-affirmed and strengthened their former resolution.

The wholesale work done at the north transept, and to a considerable extent at the south transept, and round the base of Bishop Hacket's restored central spire, is a sad and grievous wrong done to church and national history (Lichfield being the only cathedral church satisfactorily treated at the time of Charles II's restoration), a complete waste of public moneys, and an unhappy exhibition of bad taste. Wyatt and his compeers ruined much of Lichfield Minster and other great churches by striving to drag them back to classical and renaissance styles, which were to their mind the perfection of beauty. Are Messrs. Scott and Pearson, and those who are their tools, any better in fixing up the thirteenth untraceried style as their beautiful ideal of church beauty, and recklessly dragging out and putting in all that tends to reduce a great fabric stamped with the life and teaching of some eight centuries to the dead level of an imitation of some fifty years of the reign of Henry III? One idea is as monstrous and bad as the other.

Last year the generosity of Dean Luckock led to the reparation and restoration to its proper use of the beautiful Early English chapel of St. Chad's Head on the south

side of the quire. We have no quarrel with this work.

Happily the protests of 1892-3 led to some good results : funds ceased in a great measure to flow in, and for the present, we believe, Bishop Hacket's roofs are safe.

Terrible and irreparable mischief was done to the exquisite cathedral church of SALISBURY by that iconoclastic barbarian of the end of the last century—Wyatt—who was let loose upon the building, under Bishop Barrington (1782-1791). In a comparatively short time he swept away screens, chapels, and porches; broke up monuments of knights and ecclesiastics, and marshalled the remainder in two rows down the nave; obliterated ancient paintings, and flung the stained glass by cart-loads into the city ditch; and levelled to the ground the thirteenth century detached bell-tower, as well as the Beauchamp and Hungerford chapels. And yet there were those, and not a few, of his day who pronounced his work to be "tasteful, effective, and judicious." Nor need we smile at such encomiums, for some of the Victorian restorers, who have approximated to Wyatt in the horrors they have perpetrated (he has been out-heroded at St. Albans), have won, and still win, much continuous praise from the thoughtless, the professional, and the ill-instructed.

That noble octagonal building the chapter house, which was dangerously out of repair, was begun to be repaired in 1854 as a memorial to Bishop Denison. The restoration extended over many years at a great outlay, and has on the whole been worthily accomplished. Recently the new painting has been scraped off.

In 1862 Sir Gilbert Scott undertook to spend £10,000 from the Ecclesiastical Commissioners, and a large sum from the public in restoration. Endeavours were made to undo Wyatt's barbarisms, and not a little good was effected; but it was a sad mistake to remove the quire screen, to refloor the Lady chapel, and to use so much diligence in scraping the walls and replenishing the Purbeck marble. The interior, for the most part, looks sadly new, but that is what the thorough restorer desires.

The recently-detected dangerous condition of the far-

famed Salisbury spire has been caused by the drainage of the city which has considerably reduced the water level, with the natural result of a shrinkage in the subsoil. This shrinkage has brought about an uneven settlement. The work of underpinning the four great piers of the central tower and spire, and forming a bed of concrete beneath their shallow foundation will, it is trusted, make all secure. An architect of much experience and intimately acquainted for years with Salisbury Cathedral Church, tells us that the stone quire screen ought for safety's sake to be replaced, as it would tend once again (as it did before) to tie the piers together in their weakest part.

As to the work now going forward on the face of the tower, we express no positive conclusion beyond saying that in the opinion of some competent judges much of this work is excessive and unnecessary.

On the south side of the presbytery of the cathedral church of WELLS was the beautiful chantry chapel of Bishop Beckington, the great benefactor of both Bath and Wells, who died in 1464. In 1681 a pew was arranged for Dean Bathurst's lady within the fine iron grate of this memorial chapel, but (to use the recent words of Canon Church) "it was reserved for the restorers of this nineteenth century to thrust aside that historic monument in order to obtain a few more feet for the 'free seats' which now crowd the presbytery." The canopied reredos over the chantry altar was torn down, and placed in the east aisle of the south transept. The effigy of the good bishop, in its two stages, was at the same time removed to the south quire aisle. It may thus be again noted that this mischievous idea of a parish church in a cathedral quire is responsible for the irreparable destruction and dispersion of a highly interesting and tasteful chantry chapel, where the mayor and corporation of Wells were wont to repair in solemn annual procession, to pray for the repose of the bishop, who had done so much for them and for their city.

The Lady chapel and west front were restored by Mr. Ferrey in 1842, at a considerable cost.

A reconstruction of the quire of Wells was unhappily made about the middle of this century, wholly destructive

of the ancient order. The wooden stall-work—the very best of English wood carving—was removed, the stalls themselves being thrown back between the columns. The prebendal stalls were pulled up from their proper place in the upper row, and ten of them were lost in the process. The misericords were roughly refitted in the lower range of seats. This unhappy disarrangement, artistically bad, and wholly inconvenient for the due seating of an ecclesiastical community, was the work of Mr. Salvin. It was begun in 1848, and finished in 1854.

At a later date the Decorated quire screen was much spoilt by being enlarged and brought forward for the purpose of supporting a bigger organ.

A recent project for having a nave altar for congregational services unfortunately dropped through when nearly completed. It is much to be hoped that it will shortly be revived.

With regard to the cathedral church of EXETER there is not so much fault as usual to be found with the work of the Victorian age. The beautiful pulpitum or quire screen, the work of Bishop Brantyngham (1370–1394), still supporting the organ, most happily remains in its proper place. The rage for “opening out” was content in this instance with taking out the backs of the two broad ogee-arched altar recesses, supported on Purbeck marble shafts, which are on each side of the lower part of the pulpitum. The folly of this mutilation now again became apparent by the practical inconvenience of the draughts; so having made these holes the ‘restorers’ were next compelled to glaze them.

Much, however, of the work accomplished here by Sir Gilbert Scott (who began in 1870) is of a satisfactory and worthy character.

The upper part of the fine west front has quite recently undergone repair, but the repair seems to have been necessary and not wantonly nor lightly undertaken. The screen, with imagery below, has fortunately been left untouched.

The cathedral church of NORWICH, in addition to the unfortunate tinkering of the west front, obliterating almost every trace of its Norman origin, has suffered by the needless renewal of the tracery of many of the windows

With regard to the interior, Dean Goulbourn was unfortunately induced not only to destroy all the fifteenth century levels of the presbytery, but to begin to recon-vert that part of the church back again into the Norman style, owing to Norman bases being found when the pavement was lowered. The result is that the fifteenth century bases are left hanging in the air, whilst bogus Norman shafts are carried right up to the clerestory string, where they have to stop in a meaningless fashion!

In more recent days, under the present dean, the floor levels of the quire have been further tampered with; the eastern portion of the stalls deposed from their original level and set up on the new floor; and the transepts thrown open to the quire—and all this for mere preaching-house purposes, for which this portion of the splendid historic fabric was never intended, and is wholly unsuitable.

The cathedral church of WORCESTER, abounding in good examples of English architecture from the earliest Norman to the latest Perpendicular, has suffered many and grievous things at the hands of the Victorian restorers.

Extensive works of restoration were begun in 1857 under Mr. Perkins. The large east window was taken out and ten lancet lights of sham Early English put in its place. The south end of the eastern transept was rebuilt, and it was flanked by “improved pinnacles.”

In 1858 the Ecclesiastical Commissioners appropriated a sum of £15,000 towards “the substantial reparation of the fabric,” and a considerably larger sum was raised by public subscription during the next few years.

Between 1860 and 1874 continuous “restoration” was in progress of the most vigorous and destructive character. The whole of the valuable and historic alterations of the fifteenth century were swept out of the quire and Lady-chapel, the Perpendicular windows giving place to sham Early English lancets. A somewhat similar course of wholesale alteration, rebuilding, and effacing of history went on throughout the nave and transepts. Mr. Perkins was responsible for the exterior and Sir Gilbert Scott for the interior.

The cathedral church at last emerged from their hands

smart and garish, but a piteous travesty of what an ancient minster church should be. Had they utterly pulled it down and built all afresh it would have been in many ways better. As it is, the result is as painful and forbidding as a venerable old lady overlaid with paint and cosmetics and bedizened in youthful attire.

Many a detail and interesting component part of the fabric disappeared during the prolonged process of "thorough restoration," but the crowning act of absolutely wanton destruction, before which in its enormity everything else pales into insignificance, was the demolition in 1862 of the ancient Guesten Hall of the cathedral priory, a beautiful example of Decorated work. Mr. J. H. Parker, writing at the time in the *Gentleman's Magazine*, said:—

"This magnificent guest-chamber of the fourteenth century was an historical monument of considerable importance, as shewing the splendid hospitality of the clergy of those days, and as illustrating in a remarkable manner the manners and customs of the time of Edward III. It was the last of these structures that we had remaining, and with it we have erased a chapter out of the history of England."

This splendid hall was pulled down from the meanest of motives, simply because the dean and chapter were afraid of what it would cost them to keep it in repair. Not the slightest effort was made to procure funds for its salvation. Moreover, it was in no specially bad condition; and even if it had not been touched, the walls and roof would be now standing.

The shocking treatment of the cathedral church of Worcester and its adjuncts provoked most vigorous protests even thirty years ago; foremost in the opposition were the *Athenæum* and *Saturday Review*. The latter journal, in the midst of this revel of restorationists, thus let fly with stinging effect, but, alas! the mischief was mostly done, and the rest was obstinately continued:—

"Whoso would see the penny-a-liner's power transferred to stone, let him turn aside and look at the renovated outside of Worcester. Here is verily the fastian of architecture and the doggerel thereof. The old race of sloths and slovens could never compass such devastation in centuries as this which has been achieved in a single lifetime. The deans and chapters, vergers and sacristans, of other and

less 'aesthetic' periods did not, at any rate, do much more harm below than the rooks and jackdaws did above. They merely pecked and clawed a nook or angle here and there. Now, 'as by the stroke of an enchanter's wand,' we see a grand transformation effected. The beautiful and deep mouldings are frittered away. The windows keep their outline, but there is a spirit of impoverishment and shallowness in every detail. A featureless face is upon everything. It is not merely new and sharp, which of course it could not help being if it were scraped; but it is meagre, and pawky, and rapid. It is smug and spurgeonised. . . . What then do we find this Dean and Chapter doing? They are letting loose a local genius to work his will on the venerable walls which other and better men have raised, and the form of which they themselves could never have even distantly approached in conception. They are making havoc of all that the centuries have bequeathed us, and that the touch of time has spared. They are effacing the only elements in which yet lingers the possibility of a revival of church architecture. They are destroying the title deeds and credentials of art under the pretence of restoring. Thus they break up the very patterns which convey first principles, and give back in their place the bauble conceptions of the nineteenth century."

The Queen, even, was made to contribute her share to this renovation run mad, through the Board of Works. Because certain of the royal effigies at Westminster are of gilded bronze, the remarkably good effigy of King John, in Purbeck marble, nobly figured by Stothard, was absolutely plastered all over from head to toe with gold leaf, and a crown of glittering brass thrust over the damaged one of marble! The only thing to be said is that the vulgar gilded effigy is worthy of the garish general restoration, and *vice versa*.

Quite recently the unwholesome mania for ever growing, and huger organs has been responsible for a further maltreatment of the very little work not already hopelessly spoilt. The overgrown organ required more wind, so an electric motor-engine was provided, and the engineer, to find it room, blocked up a chapel of the crypt below the slype with brick walls. The chamber thus formed was daubed with tar to make it damp-proof, with the result that some ancient wall-paintings on the old side walls were hopelessly destroyed. Vigorous remonstrance has since caused the clearing out of these obstructive brick walls, and a change of place for the engine, but the destructive effects of the tar cannot be effaced.

Much as the very interesting cathedral church of HEREFORD has suffered from the hand of time during the

many centuries of its existence, it has assuredly suffered more from the hand of the restorer.

In 1786 the western tower fell, carrying with it the west front. That arch-destroyer Wyatt was then in the thick of his evil works at Salisbury, and unhappily he was also given Hereford to devour. Between 1788 and 1797 he spent £20,000 on the church, shortening the nave by an entire bay, destroying the Norman triforium and clerestory, and running up a west front of his own.

The east gable of the Lady-chapel threatening to fall in 1841, Dean Merewether called in Mr. Cottingham, the Temple church restorer, as architect, when it was found that the piers of the central tower were also in jeopardy. Another big scheme of repair and restoration was set on foot. The Victorian architect did not prove quite so wantonly destructive as his Georgian predecessor, but yet most grievous mischief was done between 1841 and 1852, at a cost of £27,000. The tower and quire were the parts that chiefly fell into Mr. Cottingham's hands. Almost all that he accomplished was of the nature of imitative rebuilding, and in no sense reparation, and he permitted the masons to re-work, and therefore spoil, the ancient sculptures.

The cathedral church yet suffered a third period of restoration, the second of the Victorian age, from 1858 to 1863, under the direction of Sir Gilbert Scott, and this was the least harmful of the three. The "Grecian" quire screen of 1710, which was a refacing of the old Norman pulpitum, was destroyed by Mr. Cottingham. Sir Gilbert Scott put up a great painted and gilt screen of iron work, "which by its extreme lightness would permit the whole building to be used for congregational purposes"—a false idea of cathedral use, which, as we have seen, has been responsible for so much that it is hopelessly wrong in the later Victorian treatment of our great minsters.

Under this mistaken notion of a parish church, another serious blunder has been made, for the new iron screen is not set up on the old line west of the crossing, but stands beneath the eastern arch of the tower, with the result that the quire and presbytery are now crushed into the space which formerly served only for the presbytery. The organ has been pushed away from its ancient

position over the screen under one of the arches on the south side, assisting to materially darken a part of the church which was already imperfectly lighted, and compelling the daily service to be frequently sung by gas-light.

The elegant octagonal spire of CHICHESTER, dating from the end of the fourteenth century, was in jeopardy in the time of Sir Christopher Wren. He took down and rebuilt the upper portion and devised a cunning great pendulum of wood to swing inside the spire as a counter-balance to the force of the wind.

On February 21st, 1861, the spire collapsed like a telescope, and fell into the crumbling ruins of the tower piers. The rebuilding of the tower and spire by Sir G. Scott after this great disaster was well accomplished, provided the slavishly imitative principle is admitted to be the best. The rough-hacked Norman stonework and the delicate Decorated traceries were all reproduced. Had this disaster happened in mediæval days, it would have given an opportunity for greater dignity and beauty in the succeeding structure; but all our big architects, when patching cathedral churches, seem afraid of consciously doing anything that is nineteenth century. A cunning imposture is their ideal of meritorious work.

The quire was formerly separated from the nave by a dignified stone screen or pulpitum carrying the organ. It was usually known as "Bishop Arundel's Oratory," and dated from the end of the fifteenth century. This pulpitum was not only beautiful in itself, but gave considerable dignity to the whole interior of the church, and was of peculiar and most interesting construction. The unhappy rage for "affording greater accommodation to the public at the cathedral services," an intention absolutely alien to the whole conception of cathedral quire offices, brought about the removal of this noble screen in 1859. Moreover, in the opinion of many competent folk, the taking down of the quire screen, which banded together two of the great tower piers, gave the first impetus to the fall of the spire. This mischievous work of destruction originated in a bequest of £2,000 from the late Dean Chandler "for the decoration of the cathedral"! The sum was increased by public subscrip-

tion, and then the work went gaily on under Mr. Slater; not only the screen, but the returned stalls were swept right away, "as a measure imperatively necessary for the opening out of the choir into the nave"; and when the whole character of a cathedral church had been successfully obliterated, and historic traces of previous centuries and former deans and bishops entirely stamped out, the committee looked round on what they had done, and said that it should serve as "a worthy memorial to Dean Chandler."

The 1859 "restoration" also restored out of existence a Perpendicular reredos, for which Mr. Slater substituted the present most unfortunate erection; but it was left for Sir Gilbert Scott at a later period of restoration effort to absolutely needlessly efface all the traces of St. Richard's shrine behind the high altar by destroying the platform on which it had stood, and laying down in its place a plain pavement level with the aisles.

At the present moment many thousands are being asked for to enable Mr. Pearson to "restore" the south-west tower.

The quire of the cathedral church of ROCHESTER underwent a complete remodelling between 1825-1830, under Mr. Cottingham. The greater part of the central tower was also renewed and raised under like direction and at the same period.

As to the treatment of the fabric and its fittings during the present reign, the work of Sir Gilbert Scott, from 1871 to 1877, was in this instance mainly confined to necessary and useful repair, though with his usual perverseness in that direction he placed the high altar too far back, on a site which it had never previously occupied, and insisted on substituting his favourite imitation Early English lancets for sound later work.

During the last few years, however, there have been most unfortunate changes made in the west front under Mr. Pearson's direction, money being again squandered in the production of bogus Norman work in a weak effort after uniformity. The Norman west front is flanked by two turrets, and by two wings that terminate the nave-aisles. The turret on the south side is original, but that on the north side (until lately) was octagonal and

of the same Perpendicular date as the nave clerestory. Mr. Pearson in his wisdom has unnecessarily pulled down this interesting bit of architectural history, and has made a turret of his own in stupid imitation of the one on the south side. He has also treated after a like fashion the wings on both sides. And then, forsooth, they call this pulling down of fifteenth century work, and the substitution of Pearsonesque Norman, "restoration," and the public seem still willing to subscribe to bring about such treatment of our historic buildings! It is some satisfaction to know that two of the more eminent fellows of the Society of Antiquaries retired from the Rochester restoration committee rather than be participators in this destructive measure.

Funds, we understand, are now being earnestly sought to provide a new central tower. Certainly Mr. Cottingham's effort of 1825 had a mean result; but in our opinion a new central tower implies such a displacement of and interference with an old fabric that it is a most questionable proposition, and certainly in no way a necessary work.

The crypt, one of the finest in England, suffered under Sir Gilbert Scott, the eleventh century portion, built by the famous Bishop Gundulf, being built off for the organ bellows and machinery. It has also been a more recent sufferer, for the whole of the south aisle has been partitioned off into vestries with Dean Hole's American dollars.

Happily, Sir Gilbert Scott suffered the fourteenth century quire screen or pulpitum to remain. The west side of the pulpitum was left plain and unadorned, for even that great restorer rightly refrained from ornamenting it. As a memorial, however, to the late Dean Scott, Mr. Pearson has been suffered to hopelessly deface and modernise this screen. He has scooped out the face of the ancient wall so as to make eight niches for saints, and they are now filled with mean sculpture.

The see of Oxford was established in 1546 at the church of St. Frideswide's priory, which then became both the cathedral church of Christ Church and the chapel of the college.

The alterations that were begun in this church in 1856

brought to light various interesting matters. In 1870 the church was put into the hands of Sir Gilbert Scott for thorough treatment, and the work was in active progress from 1872 to 1876.

The rather awkward screens and other woodwork of Wolsey's date were re-arranged after a capricious fashion. The restorer also took out the great Decorated window at the east end, and substituted sham Norman openings. The treatment of the south transept, which had been cut off and used as a verger's house, was unnecessarily wholesale.

The noble Benedictine abbey church of PETERBOROUGH became the centre of the newly-formed see in 1541. So great a building demanded constant care and expenditure, and the chapter seems fairly to have maintained the fabric for the three and a-half centuries that it has been theirs. At all events, they never handed the church over to the tender mercies of Wyatt or his crew at the beginning of the century.

Towards the end of the seventies several thousand pounds were wisely expended in the strengthening and underpinning of the foundations on the north side.

The more recent rebuilding of the great central tower (1883) was a far more serious undertaking. The work was absolutely imperative, but probably would not have become so had it not for a long time been neglected. Under the capable control of Mr. J. T. Irvine the work was undoubtedly well done, but surely there was no necessity for the introduction of so many new or dressed stones. One gentleman of considerable powers of observation assures us that as large a proportion as sixty per cent. of the stones are new. The tower has been raised seven feet.

With regard to the hopeless muddle and confusion that our two or three big architects have been making of cathedral quire arrangements during the present reign, it may be noticed that at the same time that Mr. Pearson was advocating the parish church notion at Rochester, he was responsible for reproducing the lost monastic quire at Peterborough, by carrying the quire through the crossing into the nave, and by giving designs for a solid screen! Both notions cannot be right.

Last year the memorable question of the West Front came under consideration. The vehement controversy is so fresh in our minds that it need now be only briefly summarised. The chief glory of the church of Peterborough is its magnificent triple portico. It is not only one of the most splendid features of English architecture, but causes Peterborough to stand out pre-eminently among the cathedral churches of all Christendom. Hence the vigour with which the battle was waged, although the nature of the chief point at issue was practically the same as that which had been fought out on many previous occasions.

The school of restorationists advocated, to save trouble, the rebuilding of the front piecemeal as its only chance of salvation, quite overlooking the fact that by taking it down the thirteenth century building thereupon ceased to exist. If a shirt of mail is divided out into its component rings, or the quarries of an old stained glass window separated and unleaded, both the mail shirt and the window come to an end, and no amount of cunning re-adaptation can make either of them in any true or artistic sense what it was before.

It had long been known that something must be done to sustain the west front. The Society for the Protection of Ancient Buildings had been in active correspondence on this very point with the dean and chapter as long ago as 1886. The storm of March, 1895, which did some very trifling damage, at last concentrated the attention of the authorities on this too long delayed question; a great scaffold was erected, and in July, 1896, Mr. Pearson advised the taking down and rebuilding of all three gables, beginning with that on the north.

The anti-restorationists, represented by the Society of Antiquaries, the Society for the Protection of Ancient Buildings, and their numerous supporters throughout the country, while recognising the necessity of repairing the west front and arresting the gradual settlement (which was the only cause of the mischief), advocated (1) the effectual underpinning of the thirteenth century front, and (2) the gradual removal of the disintegrated backing of the gables, and its piecemeal replacement with material properly bonded into the original facing which would be

in no way disturbed. This is exactly the same principle as relining an old painting, a process with which all artists are familiar as applied successfully to many of the art treasures of Europe. The anti-restorationists, backed in their opinion by practical engineers, builders, and architects, offered to defray the cost of this treatment of the north gable; but they were repulsed with scant courtesy. To save their *amour propre*, and to end the controversy, the dean and chapter began in haste to pull the north gable down. It has now been completely rebuilt with almost the whole of the old stones, the cross having been replaced only last month.

We suppose that the chapter will now flatter themselves on the signal success of their undertaking; but it is well to remind them that the thirteenth century north gable has been destroyed, that it is as dead as Queen Anne, and that what they have got in its place is a work of the nineteenth century built of thirteenth century stones! The process, too, of restoring it to the perpendicular has not been accomplished without a considerable departure from the original lines, and a deliberate twisting of the walling to make it coincide with the unstraightened bulk of fabric beneath the gable.

It need not, however, be thought by the anti-restorationists that their energetic protests have been thrown away; contrariwise they have effected much good. The attention that this controversy aroused brought about far greater care in the rebuilding of the north gable than was shown in the rebuilding of the central tower. We are assured that the central gable will not be taken down, and that the south gable will receive milder restorative treatment; the reckless flow of subscriptions has been checked; and the piers have escaped their threatened removal. There are, however, some misgivings as to whether the underpinning of these piers, as carried out by Mr. Pearson, has as yet been thoroughly accomplished.

GLOUCESTER'S great church of a mitred Benedictine abbey, "the cradle of the Perpendicular style," became in 1541 the cathedral church of the newly established bishopric.

Between 1853 and 1863 very considerable restorations

were made within and without the church by Mr. F. S. Waller, with far less damage than in most similar cases. The work was continued by Sir Gilbert Scott in 1867.

The quire or organ screen, which dates from the time of Edward III, though much interfered with in 1741, and again in 1823, still happily divides the nave from the choir, though those who ought to know continue in their ignorance to persist that it "materially interferes with the utility and beauty of both."

The Lady-chapel has of late been put into the hands of Mr. Pearson with unhappy results.

The dignity and massive grandeur of York's great minster church is still well maintained. The chief harm done to the fabric and its fittings during the present century has been the result of fire.

In 1829 the quire was set alight by the lunatic Martin, with the result that the stalls and organ and quire roof were entirely consumed. The sum of £65,000 was spent on the restoration and replacement of the destroyed work, which was on the whole satisfactorily accomplished.

In 1840 a fire that originated in the south west tower reduced that tower to a shell, destroyed the bells, and completely consumed the wooden vault roof of the nave. It cost £23,000 to make good the damage, and again it may be said that the work was well done. The architect was Mr. Sidney Smirke.

The whole of the vast nave was fitted, in 1863, for congregational purposes, with movable benches and choir seats, and with a good organ of suitable size. This is a most commendable feature of the church, the quire offices thus remaining distinct from those for big congregations. It is much to be hoped that the old use of an altar at the east end of the nave will be ere long restored, for worship of the Church without its central feature is as meaningless as would be the House of Lords without the throne, or the House of Commons without the Speaker's chair.

There is not much to find fault with in the treatment of this noble minster in the Victorian age, save the undue and unnecessary newness of the clerestory of the south transept when restored by Mr. Street in 1874-5.

The Chapter House, however, received very bad treat-

ment in 1844, when a bequest of £3,000 was expended upon it. All traces of ancient painting and gilding were then cleared away, and the old pavement taken up to make way for Minton tiles. Nevertheless, as has been well remarked, "no amount of restoration has as yet deprived this building of its right to stand at the head of English chapter houses," and it remains fully entitled to the distinction implied in the ancient verse painted on the left side of the entrance—

*Ut rosa flos florum,
Sic est domus ista domorum.*

The glorious church of DURHAM, in its inspiring situation, built in all its imposing proportions by Bishop Carilef in the three short years of 1093–1096, has suffered most acutely during the present century. So careful and eminent a writer as Rev. Dr. Greenwell, F.R.S., F.S.A., who knows and loves its every stone, does not hesitate to say that

"it is impossible to speak in too strong terms of the stupid and unintelligent manner in which the whole cathedral has been treated not only in Wyatt's time, but even in these later days of architectural revival. Many important features which, in part at least, told the story of the church, and which might have remained to tell it to future times, have been ruthlessly swept away. Windows and doorways and mouldings, historical and architectural facts, of high moment as they were, have been destroyed without any apparent reason, and are now as completely gone from us as though they had never existed."

The beautiful Early English eastern extension, termed the Nine Altars, has a platform on the west side upon which the shrine of St. Cuthbert was placed, and within which his bones still rest. Until about 1844, this platform was surmounted by an oak screen of excellent though late design, and of good workmanship. In all probability it dated from the time of Queen Mary. The Victorian restorers, however, pronounced it "inferior and obstructive"; it was dragged out and mostly destroyed, but a piece of it, robbed of its cresting, serves as a screen in the University Library.

In 1620 Dean Hunt and the Chapter gave a handsome large white marble basin to serve as a font. "This was recklessly removed," says Dr. Greenwell, "not many years ago, with many other treasures, by those who ought to

have had more regard for possessions which had been handed down to their care by the pious liberality and taste of great men of old." The substitute is "a contemptible piece of pseudo-Norman sculpture in the shape of a font."

Nor does it seem possible to forgive, from an historical or archæological standpoint, the destruction by the Victorian restorers of the grand and characteristic quire screen of richly carved oak placed here by the great Bishop Cosin in 1662. This screen, which bore the organ, was pulled down in 1847, and the whole church thrown completely open. The stall work of the quire, which had remained in all its comeliness and beauty as erected by Bishop Cosin, was, about the same time, cruelly chopped up and pushed back between the piers. By this iniquity it was stated that "about thirty sittings were gained," so once again the mischievous idea of playing at parish church in a collegiate quire, combined with the "open vista" notion, were the main causes of this irreparable damage.

Again, Cardinal Langley (1406-1437) effected many improvements and repairs in the Galilee and at the west end of the church. Behind his own tomb he placed the altar of the Blessed Virgin. Here again we quote at some length from Canon Greenwell:—

"The woodwork of the reredos of that altar, of great interest, containing paintings of the early part of the fifteenth century, was taken away not many years ago and not a vestige of it now remains. Why it was thought necessary to destroy this I cannot say, though I have been told it was to obtain an uninterrupted view from one end of the building to the other. It is difficult to speak of the wanton destruction which has taken place in the cathedral with any degree of patience. There has been more mischief done during the last forty years than was done previously during a couple of centuries. Beautiful pieces of work, containing many interesting features, have been swept away under the ridiculous notion of restoring the building to what was called its original state of Norman simplicity."

"All the Perpendicular tracery in the windows of the nave has been destroyed, the south front having been at the same time defaced, during which process much Norman detail disappeared. The screen dividing the nave from the choir and those separating the transepts from their aisles, and the clock case, which had been originally erected by Prior Castell and still contained much of his work, with later additions of the time of Dean Hunt, have all been removed."

The exterior of the great central tower was entirely

refaced in 1859, and much altered in detail, a wanton and absolutely inexcusable piece of extravagant mischief.

In short, it is simply marvellous to find, when we consider all the miserable treatment that this glorious fabric has sustained during the present reign, that the cathedral church of Durham is still so imposing and noble a structure.

Extensive restorations of the cathedral church of CARLISLE were begun in 1853 and finished in 1857, under the direction of Mr. Christian, at a cost of £15,000. The result of this and of subsequent restorations by Mr. Street, though doubtless effecting some good and doing much that was necessary, was to substitute a great deal of sham Early English work in the south transept and elsewhere in the place of decent and substantial fifteenth century insertions.

The remarkable roof of the quire had been concealed in 1764 by a plaster vaulting. This was properly removed, but the tawdry colouring in blue and gold is much to be reprobated; the original colours were red and green.

There was a scare in 1880 as to the refacing of the old fraternity of Carlisle Cathedral, but the protests subsided on an assurance from the dean that there would be no unnecessary interference with a single stone.

The perversity of Victorian restorers with regard to the historical arrangement of our cathedral churches received a curious illustration at Carlisle. Generally speaking, an overwhelming desire is shown to play at being a parish church. At Carlisle, on the contrary, the building was an ancient parish church before it became the chair of a bishopric, and parishioners rightfully used the mutilated nave. Yet in this instance the restorers ejected them, and built for their use a new adjacent church!

The great church of the Benedictine monastery of St. Werburgh became a cathedral church on the founding, in 1541, of the see of CHESTER. In 1075 Peter, the first Norman bishop of Lichfield, removed his chair from Lichfield to Chester, but placed it in the monastic church of St. John Baptist, and not in that of St. Werburgh. Bishop Peter's successor, Robert of Limesey, again however transferred the see, moving it from Chester to Coventry.

The whole eastern portion of the church is Early English of much beauty, and the rest Decorated, with Perpendicular alterations and additions.

In 1844 the "restoration" of the quire was begun by Mr. Hussey, under Dean Anson. The fabric of the Lady-chapel was taken in hand in 1856, and subsequently this building was decorated. The Ecclesiastical Commissioners assigned a sum of £10,000 for "general restoration" in 1868, which was very materially increased by the chapter and general public, Sir Gilbert Scott being entrusted with its disposal.

If but one-tenth of the great sums expended on this ancient building during the Queen's reign had been applied with judgment and taste to this interesting Benedictine church, it would now be standing as a comely and carefully repaired example of ecclesiastical work originating in the twelfth century, and suitable in every way for the nineteenth century centre of a bishop's see; but as it is, can anyone admire the big church of St. Werburgh as a whole, or find beauty in most of its restored parts?

The quire screen, which was plain but good work of the fourteenth century, was moved and "restored" almost out of recognition prior to 1868, and was then swept away, organ and all.

The whole of the levels of the quire and presbytery were altered, and reduced to one common term.

The episcopal throne, at the end of the stalls on the south side, was formed, in the time of Henry VIII, from the base of the shrine of St. Werburgh. Alas! the restoration mania could not even leave this interesting relic alone, though in substantial repair. In 1846 Canon Slade restored it in memory of Bishop Law, and made much confusion of the parts. Recently the throne has been taken to pieces, and the parts of the old shrine rightly removed behind the high altar. The re-erected shrine is not, however, even now in its original place. The filling up of the missing portions with modern masonry left in the block is much to be commended.

The Lady-chapel was clean swept of everything later than the Early English period, a great deal of excellent old Perpendicular alterations and insertions being dragged

out to make way for the bogus thirteenth century work of Messrs. Hussey and Scott.

But the worst feature of the whole of the work by Sir Gilbert Scott was the deliberate obliteration of the good south side chapel of the Lady-chapel, simply to gratify the restorer's pleasure in an endeavour to show his cleverness in reproducing an imitation of an apse of the time of Edward I, crowned with a great heavy pyramidal erection which has been pronounced to be the ugliest conception that ever proceeded from the mind of a Gothic architect.

A really comic bit of foolishness was also perpetrated during Chester restoration. The cloisters were "restored," and a row of closets (" carrels ") such as the Benedictine monks would have used for study in the fifteenth century, was actually set up, all brand new, in the south alley ! As if either the canons of Chester or anyone else would ever dream of using them ? Indeed, if Benedictine monks went back there, they would not want them, for the whole conditions of study have changed. It is as silly a bit of wasteful work as it would be to replace (in these days of cheap clocks and watches) an hour-glass in a pulpit !

To Worcester pertains the discredit of being the most thoroughly "restored" of our old cathedral churches, but Chester is a good second.

The wooden spire above the central tower of RIPON (which became a cathedral church in 1836) was blown down in 1660, destroying in its fall the quire roof. The roof was restored, and the spires of the west towers removed for fear of a like calamity. The nave was re-roofed and the choir groined with lath and plaster in 1829. This work was done by Mr. Blore at a cost of £3,000. In 1842 the Ecclesiastical Commissioners made some inadequate repairs.

The chief Victorian restoration took place between 1862 and 1872, when about £40,000 was expended by Sir Gilbert Scott. Much of the work then accomplished was simple, necessary, and well done, but there are two serious blots. The early Perpendicular windows of the west front, with their beautiful tracery, were destroyed, their place being taken by insipid Scottish imita-

tions of the work of the thirteenth century. The high altar was most unfortunately removed to the easternmost arch, thus destroying the ancient processional path.

The collegiate church of MANCHESTER became cathedral on the foundation of the see in 1848.

The old work is almost entirely of fifteenth century date. Since it became cathedral, the church has been extensively restored throughout, and most parts rebuilt often not on the old lines. The brown sandstone from Collyhurst of which it was composed had suffered much from the weather, so that its refacement in many places with millstone grit from Ramsbottom became a necessity, and no blame, but credit, is due to the chapter architect, Mr. Holden, who carried it out.

The western tower was rebuilt from the foundations, apparently on insufficient evidence as to its instability. It is not, however, a copy of its predecessor; and when such new work was being done, it seems a pity that it did not assume the form of a more dignified west front.

Mr. Holden's restorations lasted from 1845 to 1868, the west tower being the conclusion. Since then much has been done to this modernised church by Mr. Crowther, but not of a character to call for any special comment. The parapet of the clerestory has been mistakenly broken up into battlements. It was originally in one long straight line, an arrangement which added much to the apparent length of the building, and hence to its dignity.

From the time of the surrender of St. ALBANS abbey church in 1539, it remained deserted until 1553, when it was sold to the mayor and burgesses of the town for £400. The Lady-chapel was then turned into a grammar school, and the great church made parochial. The parish or town proved fair custodians. The church was far too large for their requirements, and therefore only the old quire and transepts were used. Up to 1870 the building enjoyed an almost complete immunity from the tricks and mischiefs of the restorationists.

In that year restorations began well by the ejection of the grammar school from the Lady-chapel, and was followed by the difficult and necessary task of the repair and sustaining of the great central tower.

The establishment of a bishopric at St. Albans gave a

great impetus to the restoration schemes. Controversy waxed fast and furious; that "wealthy, overbearing architectural charlatan" (we quote from the 2^d vol. of the *Sacristy*) Sir Edmund Beckett, now Lord Grimthorpe, appeared upon the scene, and eventually, through brazen effrontery and the power of a bottomless purse, carried everything before him.

For over twenty years this one man, by the power of a faculty that casts a slur upon all concerned in its granting, has worked his own sweet will upon this once beautiful church, and by what he has destroyed and by what he has put up has made himself the laughing-stock of the architectural world and the scorn of all who love to see the evidences in stone of the history of their nation and their church. It would be going over very old ground to recite even in the briefest way the miserable wrongs done to this ancient fabric. The plates of contrasts, showing the lovely old work and the baldness and poverty of this coronetted builder's conceptions, drawn by the late Mr. Steinmetz, ought to be in the hands of every learned society or working ecclesiologist to serve as awful warnings.

The term to *grimthorpe*, that is, to spend lavishly after a destructive fashion upon an ancient building, has recently come into use in several of our high-class papers and magazines, and has even found its way across the Atlantic. The headstrong spoiler of St. Alban's has certainly, after this fashion, attained unto fame. The end of the eighteenth century had its Wyatt, and the end of the nineteenth has its Grimthorpe; both doubtless well intentioned after their lights, but both of them devastators of the most extreme type.

Byron must have had this overbearing chancellor of York prophetically before him when he thus satirised the Lord Henry of his days (the italics are original):

"There was a modern Goth, I mean, a Gothic
Bricklayer of Babel, call'd an architect,
Brought to survey these grey walls, which though so thick,
Might have from time to time acquired some slight defect;
Who, after rummaging the Abbey through thick
And thin, produced a plan whereby to erect
New buildings of correctest conformation,
And throw down old, which he called *restoration*."

England's old cathedral churches have now been all separately named, together with the special Victorian achievements of those responsible for their custody. Nothing has been knowingly exaggerated, and naught has been set down in malice, or from a spark of ill-will towards any member of a capitular body or restoring architect. The indictment is a heavy one, and might have been most materially extended had it included some of our great collegiate or minster churches such as Westminster, Selby, Beverley, or Hexham.

Lack of time and space have also excluded almost every reference to the wanton removal, disfiguring, or ejection of monuments, in which sorry work many of our deans and chapters have set such an evil example during Victoria's reign. Another branch of the same subject is the irreverent readiness they have shown to gratify their own curiosity or that of morbid antiquaries by routing into the graves or coffins of distinguished Christian ecclesiastics or civilians, whose remains were supposed to be laid to special rest within the minster's hallowed walls. Westminster Abbey is a notorious example of these two once rampant evils, as I showed in detail in the annual address for 1893 that I had the honour to deliver before the Society for the Protection of Ancient Buildings.

Cathedral restorers have also been prominent in a variety of bad works that tend to effectually demolish the ancient character and interest of the building, or to disfigure its walls—such are undue scraping of masonry, and polishing or varnishing of Purbeck or other marble; the filling up of all surface scars and chips, and renewing of slightly decayed or irregular stones; the casting out of old flooring stones or pavers; the cleaning off of paint and gilding from old woodwork, or its revarnishing; and the plastering of the walls with ugly bright brass blisters below newly-glazed windows, of which York and Rochester are conspicuous examples.

It is anything but a pleasant or congenial task to draw attention to these sad proceedings. Those who do it run some real risk of endangering friendships, of being accused of interested, mean, and personal motives, and of being coolly regarded by those for whom, in all other save anti-

quarian respects, they may have the greatest regard and esteem. But these protests are by no means useless. Their continuance and repetition warn others from like mistakes, and to my certain knowledge many a blunder and irreparable mischief has been checked by timely protest in cathedral as well as in parochial churches. It was the deliberate opinion of the late President of the Society of Antiquaries, whose loss we all so deeply lament, that the great protest as to Peterborough has borne and will continue to bear much fruit.

But may we not do something more than merely protest individually or corporately in our societies? Does it not become us to resolutely endeavour to check the unlimited power of mischief now possessed by deans and chapters? The time seems ripe for such concerted action, and it is necessary if the remnants of our old minsters are to be saved from the further vandalism of the restorer.

Deans and chapters have at present the power—and some of them are not loth to exercise it—of riding rough shod over educated and reverent opinion. In 1864 the following words were addressed to the dean and chapter of Worcester:

“I feel bound to suggest that these are scarcely questions which should not be left to the decision of architects, without calling into council representatives of the historical and archaeological elements which are involved. The antiquities of our cathedrals, though legally under the trusteeship of their respective chapters, are morally the property of the diocese and of the country at large; and when any considerable change is contemplated (especially if it involves the removal of any objects which, whether beautiful as works of art or not, have become objects of history), would submit that it is desirable to seek the opinions and advice not only of architects, but of eminent antiquaries and ecclesiologists.”

Thus wrote even Sir Gilbert Scott, but what little attention have either capitular bodies or their selected architects paid to this suggestion!

Professor Freeman, some two years later, when contemplating the havoc wrought at Worcester, wrote:

“Deans and chapters all over England may riot unchecked. These bodies are practically uncontrollable. Who is there that can touch them? A dean and chapter, so long as they ‘paddle their own canoe,’ may bid defiance to all the architectural, all the archaeological, all the palaeographical wisdom of the world. There is positively no outrage which they may not perpetrate so long as they maintain the specious name and form of a church and a worship.

There is no amount of wreck and ruin that they may not consume under the plea of restoration. The law and constitution in Church and State knows nothing of art, its interests, its monuments. By some lucky accident we have come by those priceless and peerless possessions—our cathedrals. But though held in trust for us, the trustees have absolute power so to dispose of them as to make them worthless.”

If societies, such as the Society of Antiquaries or that for the Protection of Ancient Buildings, approach deans and chapters, with all respect and with much knowledge, about the repair of the fabrics they hold in trust, they are usually snubbed with a modicum of courtesy, and the proposition that a deputation of experienced and learned men should wait upon those in authority to state their views has more than once met with the curtest of rebuffs by that chance medley body, a cathedral chapter. Not even a Government department declines to receive a deputation when drawing up a bill, but chapters, as a rule, when undertaking with a light heart the most devastating works on their revered buildings, pour out nothing but contempt on those who merely wish to point out the more excellent way.

In his last public utterance, delivered on April 23 of the current year, the late Sir Augustus Wollaston Franks, K.C.B., gave utterance to these weighty words with respect to the conflict between the Society of Antiquaries and the dean and chapter of Peterborough :

“It need scarcely be said that the political aspect of archaeological questions does not in any way concern this Society. But it is scarcely to be expected that the high-handed action of the Dean and Chapter of Peterborough, in a matter which should have been the subject of their grave deliberation, will be forgotten by those political parties who are opposed to the existence of all Deans and Chapters. This controversy, therefore, though it seems now to have resulted in a victory for the Dean and Chapter and the advocates of ‘restoration,’ may have sown seeds that will bear bitter fruit for the ecclesiastical foundations of England

The destruction of the west front of Peterborough, and the threatened disfigurement of St. Cross Hospital, near Winchester, by their legal guardians, have again shown the urgent necessity that exists for some legislation to enforce publicity, and the restraining influence of some external sanction, before the trustees of ancient monuments are allowed to destroy or deface them by so-called restorations or incongruous additions.”

Valuable information has been officially collected during the past twelve months with regard to the action of

other civilised countries in like cases, which will probably ere long be issued in a Blue Book. It will then be found that France, Germany, Bavaria, Saxony, Austria, Spain, Greece, Sweden and Norway, Denmark and parts of Italy, all place their historic monuments, such as old cathedral and parish churches, in the hands of a State-appointed commission. It is only with Russia that England shares the dishonour of having no national legislation on the subject.

Has not the time come for England to move? By her backwardness she has lost most sadly, but there is much yet to be saved. Surely a commission consisting of the First Commissioner of Works and three Government nominees, in conjunction with the President of the Society of Antiquaries, the President of the Royal Academy, and the Principal Librarian of the British Museum (or their representatives), associated with the capitular body of the cathedral church proposed to be treated, would command general confidence? If sufficient pressure was brought to bear, the strongest Government of modern days, now in power, might be induced to initiate or to give substantial support to a measure of this character, and thereby prove the genuineness of their conservative convictions.

I would have no professional architect on such a commission, for I desire entirely to identify myself with the recent remarkable and golden words of our late friend Sir A. W. Franks, when he said last April

“I, for one, greatly doubt whether the restoration of ancient buildings should be confided to an eminent architect whose business is rather to construct new ones. As has been already observed, if we want to restore an old painting we do not go to a Royal Academician, but to some clever picture restorer. If an ancient porcelain vase required reparation, it is not Messrs. Minton that we should consult, but some expert china mender. I do not, therefore, see why ancient buildings should be treated differently from any other works of art.”

It is much to be hoped that the Institute by general resolution, or by the vote of its trusted council, will identify itself with the conservative forward movement for the safeguarding by the State of the grandest monuments of our country's gradual progress, for our cathedral churches have been truly and wisely termed “great national epochs carved in stone, and magnificent evidences of the faculty which is the shadow of God's own creative power.”

INVENTORY OF THE GOODS AND CHATTELS BELONGING
TO THOMAS, DUKE OF GLOUCESTER, AND SEIZED
IN HIS CASTLE AT PLESHY, CO. ESSEX, 21 RICHARD
II. (1397); WITH THEIR VALUES, AS SHOWN IN THE
ESCHEATOR'S ACCOUNTS.

COMMUNICATED BY VISCOUNT DILLOX, HON. M.A. OXON, P.S.A.,
PRESIDENT, and W. H. ST. JOHN HOPE, M.A.

The following inventory of the goods and chattels belonging to Thomas of Woodstock, K.G., Duke of Gloucester, is to be found in the Escheator's Accounts Queen's Remembrancer, Herts. and Essex, $\frac{77}{4}$, in the Public Record Office.

The Duke of Gloucester, the youngest son of Edward III., was born in 1355, and in the early part of the reign of his nephew Richard II. did, with his elder brother John of Gaunt, practically govern the kingdom. In 1386 he became the head of the Council of Regency; but on 21st June 1397 he, with the Earls of Rutland and Kent, and others, was seized and tried by the King's command. On 8th September he made a confession of his misdeeds, and, having been removed from the castle of Calais to a house in that town, was smothered.

He married Alianore, daughter and co-heiress of Humphrey de Bohun, Earl of Hereford, Essex, and Northampton. She died in 1399, and a splendid brass in Westminster Abbey marks her resting place, and shows the brilliant matches of her family. For the description of his arms and those of his wife the reader is referred to Boutell. In an alliterative poem of the beginning of the fifteenth century on the Deposition of Richard II., printed by the Camden Society, the Duke of Gloucester is referred to as the Swan.¹

The inventory is written on a long roll, indented on the dexter side. It is in French, with the occasional insertion of English words when the scribe's knowledge of the

¹ *Alliterative Poem on the Deposition of Richard II. etc.* Edited by Thomas Wright (Camden Society 3), London, 1838. p. 15 and note on p. 56.

Gallic tongue was at fault, and commences with a heading, of which the following is a translation :

This indenture of six pieces fastened together made between the Treasurer of England and the Chamberlains of the Exchequer of our lord the King on the one part and Clement Spice Escheator of our said lord the King in the counties of Essex and Hertford on the other part witnesseth that the said Escheator by virtue of a writ of the Chancery of our lord the King directed to him to deliver the 13th day of December the year of our said lord King of his reign the 21st to the said Treasurer and Chamberlains to the use of our said lord the King divers goods and chattels which formerly were Thomas Duke of Gloucester's and which the said Escheator found in the Castle of Pleshy in Essex and seised them into the hands of our said lord the King by virtue of another writ and by reason of a judgement against the said Duke given in a Parliament holden at Westminster the year aforesaid, the which goods and chattels and the value of them are contained in this indenture in manner as followeth.

The contents of the inventory are arranged under ten sub-headings, as follows :

- | | |
|-----------------------------------|--|
| (1) <i>Draps de Aras</i> | (8) <i>Masses p^r sergentz et cornes</i> |
| (2) <i>Tapicerie</i> | (9) <i>Livres de die^xs romances et Estories</i> |
| (3) <i>Litz dor et de soye</i> | (10) <i>Robe et vesture cum pellu^r</i> |
| (4) <i>Lit de Worsted</i> | |
| (5) <i>Vestimenta pro Capella</i> | |
| (6) <i>Libri pro Capella</i> | |
| (7) <i>Vasa argentea</i> | |

There is also an eleventh section, but without heading, enumerating the arms and armour. Most of the headings are in French ; the others are in Latin.

The section devoted to Cloths of Arras (*Draps de Aras*), or great tapestry hangings for the hall and chambers, gives the subjects, dimensions, and values of fifteen pieces, together with a list of various bankers and carpets. The subjects are for the most part scenes from various popular romances, such as the History of Charles the Great, of Godfrey of Boulogne and the taking of Jerusalem, and the Battle between Gawain and Lancelot. Others are of a more miscellaneous character, such as the Story of St. George, an Assault upon ladies in a castle, the story of the discomfiture of a wodevose and a lion, etc. Two pieces bore pictures of the Nativity of Our Lord, and of the Nativity, Presentation, and Purification of Our Lady, and another the Story of Judith and Holofernes.

These Cloths of Arras varied in width from $2\frac{1}{2}$ yards to 4 yards, and in length from 6 yards to 24 yards, or 72 feet. The one piece of this length was valued at £48 12s. or about £1,000 of present value, and another piece which was 60 feet long was appraised at £45.

Of the bankers and carpets attention need be called only to three carpets of blue arras powdered with yellow Garters, with a total length of 20 yards and width of 4 yards, and another of the same suit 10 yards long and 4 in width; also to three other pieces of white arras powdered with angels in blue clouds holding scrolls lettered *Ihū miserere*, having a total length of $21\frac{1}{2}$ yards by $3\frac{1}{2}$ yards in width. This set too had a supplementary piece 11 yards long and 4 yards wide.

Under the heading of *Tapicerie* two items only are included. The one was a white halling (*sale*) or set of hangings for a hall, consisting of a dosser and four costers worked with the arms of King Edward III. and his sons, with borders paly of red and black, powdered with swans (the Bohun badge) and the arms of Hereford.¹ The other item specifies fourteen carpets for the chamber of the same set with another little carpet. The value of this set was £20.

Of Beds of gold and silk (*Litz dor et de soye*) there were sixteen, but the section also includes a number of carpets and other appendages belonging to the several beds. The word "bed" does not refer to the mattresses, but to the hangings, often of the most splendid character, with which the beds were furnished. Thus the first on our list is described as a "great bed of gold, that is to say, a coverlet, a tester (or canopy) and the entire *celure* (or valance) of fine blue satin wrought with Garters of gold, and three curtains of tartaryn beaten to match. Also two long and four square pillows of the set of the bed." The whole being valued at £182. 3s. or at least £3,600 of our money. No other bed in the list approached this in richness, their values in not any case exceeding £13. 6s. 8d., and descending as low as 6s. 8d.

¹ The "arms of Hereford" were either (1) those attributed to Milo of Gloucester, Earl of Hereford, *gules, two bends, one or, the other argent*, or (2) those of De Bohun, *azure, a bend argent*

cotised or, between six gold lionsels. These arms occur both quartered and separately on the brass of the duke's wife, Eleanor de Bohun, in Westminster abbey church.

Some of them must nevertheless have been pretty to look at. One great bed, for instance, was of white satin embroidered in the midst in Cyprus gold with the arms and helm (*i.e.* crest, etc.) of the Duke of Gloucester.¹ Another was of green double samite with a blue pale or stripe of chamlet embroidered with a gold pot of blossoming lilies worked in silver. Besides the usual coverlet, tester, and valance, and three curtains, there apparently belonged to this bed three carpets of green worsted embroidered with lilies and four plain green carpets. Also a dosser and two costers of green silk embroidered with white pots of lilies. The value of the whole was only £20. Other beds were of black baudekyn powdered with white roses, of green tartaryn embroidered with gold griffins, of blue with silver owls and gold fleurs-de-lis, of white with green popinjays, and so on.

The Beds of worsted (*Lit de Worsted*), as might be expected, were of more humble character than those of silk, and of smaller value, ranging from 10s. to 3s. 4d.

They were nevertheless gay with embroidery and stitch-work. Thus we read of an old blue bed embroidered with a yellow stag; another of red with a crowned lion, two griffins, and chaplets and roses; of another blue bed with a white eagle thereon; and of a red one with falcons. The section includes some single articles of interest, such as a coverlet of red embroidered with a unicorn, a blue one with a lion and roses, another red one with a white greyhound, and yet another of red with a white lion couchant under a tree. A tester and a coverlet of blue worsted embroidered with a white hart were probably so ornamented out of compliment to Richard II.

The longest section is that containing the Vestments for the Chapel (*Vestimenta pro capella*). It occupies nearly one-third of the inventory, and includes seventy-five different items. The enumeration of even a portion of these would be tedious, but attention may be called to a few interesting points. The list begins with eight or nine "vestments" as they are called. "Vestment" here includes not only a chasuble, but albes, amices, stoles and

¹ The duke's arms were those of his father, *France Ancient and England quarterly*, within a bordure *argent*. His

crest was also, like the king's, a *lion statant crowned*, but with a silver collar round its neck.

fanons, a corporal, a towel, a pillow or cushion for the mass-book, the front, counterfront and frontlet of the altar and the two curtains that hung at its ends. The richer suits are described as "entire vestments." These contained in addition several copes, and a pair of tunics for the deacon and subdeacon. Of copes, besides small sets of two, three, or four there were two sets of sixteen each, another of twenty-two, and another of eleven.

Two copes must have been of extreme splendour. One is described as "a fine cope of blue worked with divers beasts and birds with frets of pearls with Garters inscribed **Hony soit qí mal pense**, with orphreys of cloth of gold of Cyprus embroidered with images, lined with satin." The value of this was £60 or nearly £2,000 of our money. The next in the list was even more precious. It is described as "A goodly cope of gold of Cyprus worked all over with compasses and stories of imagery of the Passion etc., lined with black buckram" and valued at 100 marks. The succeeding item which describes a frontal is of interest as giving us the length of the altar to which it belonged: "A front of gold of Cyprus curiously embroidered with ten large images, containing $4\frac{1}{4}$ yards in length and $1\frac{1}{2}$ yard in depth, price £60." Another front of the same value was worked all over with the Passion of Our Lord. This and the cope above mentioned were probably of the famous *opus Anglicanum*. Since bishops occasionally were the guests of the Duke of Gloucester due provision of vestments for them was made against their coming, as for instance: "Also two dalmatics of blue satin doubled with ribands of Venice gold and two dalmatics of white cloth of gold with damask riband, two mitres of white baudekin of damask garnished with riband of gold of damask, one pair of sandals and one pair of sabatons of cloth of gold, with a pair of gloves, used for bishops." Among the miscellaneous entries may be noticed: four grey amesses of minever; a towel of white silk 7 yards long, ordained for the Maundy, and a towel for the relics; and a canopy of red cloth of gold with a blue silk fringe for the feast of Corpus Christi. Many of the vestments, etc. had heraldic ornaments. The Duke's favourite device of the De

Bohun swan frequently occurs, together with the white hart and other badges. One of the rich suits was powdered with gold lions, and the cope-hoods were embroidered with the arms of the Duke of Gloucester. The frontlet, or "frontel" as it is called, attached to one of the altar cloths or "towels" was worked with images of the Apostles and the arms of Hainault and England¹ flourished with pearls. The two last items of the section are: "a tablet of two leaves (*i.e.* a diptych) embroidered with gold of Cyprus with a crucifix and the coronation (of Our Lady) flourished with pearls," and "three tablets, each of three leaves (*i.e.* triptychs) painted with divers images." Their small values suggest that they were of no great size.

The list of Books for the Chapel (*Libri pro capella*) includes bibles, massbooks, portoses, antiphoners, grayles, legends, and psalters, together with two pontificals, a martiloge, a manual, etc. Some of these volumes are described as *bien escripts* or *bien esluminez*, and as furnished with clasps of silver-gilt, silver, or other metal. White leather seems to have been the prevailing covering, but red leather, velvet, and even cloth of gold also were used. Two of the psalters are described as *del escriptur de Fraunce*, and another as "a little psalter with silver tables in a case of red boiled leather (*quyr boilli*)." Only one other book need be noticed: "a little book of divers prayers covered with black and red velvet embroidered with swans," the De Bohun badge.

The plate used in the chapel is not specially enumerated, but appears in the list of *Vasa Argentea*. So far as the items can be identified it included two silver candlesticks weighing 4lbs. 3½ ounces, a "halywater stopp" and sprinkle of silver-gilt weighing 3 lbs. 2½ oz., a senser with four chains of silver, and a ship and spoon for the incense of silver parcel gilt, two silver cruets and a chalice wholly gilt. The other plate included basons and ewers, pottle-pots, chargers, platters, salt-cellars, spoons, masers, etc. One maser of unusual size, capable of holding three gallons, had a band and an embossed print of silver-gilt and weighed 8 lbs. 5 oz. It was moreover furnished

¹ That is of the duke's father, King Edward III, and mother, Queen Philippa of Hainault.

with a silver-gilt cover of the weight of 6 lbs. 5½ ounces. The last item on the list is "a large alms dish in the shape of a ship weighing 10 lbs." and valued at £14, or £300 of our money.

The tenth section, specifying the *Masses pour Sergeantz et cornes*, is a very short one, and contains but four items. Two maces of baleen¹ harnessed with silver were probably for ordinary use by the duke's sergeants-at-mace, but a third, of beryl or crystal garnished with silver-gilt and wrought with images and other devices, in a case of boiled leather, must have been for state occasions only. It may have pertained to the duke's dignity as Constable of England. The horns, great and small, were five in number, and harnessed with silver-gilt.

The duke's library contained eighty-four volumes of *Livres de diverses rymances et Estories*, besides "divers old French quires without titles" and "divers pamphlets and rolls in a coffer." Only three works appear to have been written in English: a Bible in two large volumes bound in red leather, a Book of the Gospels similarly bound, and "a new Book of the Gospels glossed in English." The majority of the books were written in French or Latin. Among the historical and other romances in French were the Romance of the Rose, Hector of Troy, Merlin, Bevis of Hampton, Tancred, the Romance of Lancelot, and of Alexander, the Battle of Troy, Godfrey of Boulogne, etc. Other French books treated of the Miracles of Our Lady, the Passions of divers Saints, and the Life of St. Thomas of Canterbury. The Latin works included the Chronicles of the Popes. *Bartholomæus de proprietate rerum*, *Rationale divinorum* (probably of Durandus), two large books of Civil Law, "one called the old Digests, the other the Code," a book of Decretals, another *De dictis Poetarum*, *Tripartita Historia*, *Pastoralis Gregorii*, *Egidius de regimine principum*, *Prologus sancti Ysodori*, etc. The last book in the list is "an old book in Latin and French, beautifully

¹ The use of baleen, or whalebone, for arms and armour was not unknown in the Middle Ages. See *New English Dictionary*, s.v. Baleen, where examples are cited. Victor Gay in his *Glossaire Archéologique du Moyen Age et de la*

Renaissance (Paris, 1887), i. 108, s.v. Baleine, quotes from a document of 1351 a direction for making "la garnison d'argent d'une verge de ballaine dont les virolles sont esmaillées des armes du roy, etc."

illuminated, of prayers to the Holy Cross, with clasps of latten."

The section enumerating the contents of the duke's wardrobe is a somewhat bald catalogue. It commences with a special group, entitled *Robe et vesture cum pelluĩ*, of eight gowns lined or faced with minever or other fur, of which the stuff and the fur are separately valued. No doubt these gowns had some special interest attaching to them; otherwise the reason for their being singled out is not apparent, for neither in value nor in the fact of their furrings do they differ materially from some of the items that follow. A blue gown furred with minever and wrought with Garters is the only item calling for attention.

The rest of the section enumerates divers gowns, cloaks, "slops," and caps, as well as a large number of pieces of material and "remenants." A long gown of red velvet and a mantle of the same stuff furred with minever, valued at £13. 8s. 8d., may have been the duke's parliament robe, or robe of estate; otherwise the list is of little interest either from the brief description of the garments or the materials of which they were made. Almost the last item is "21 pieces of tents with the woodwork pertaining to them" valued at £20.

The inventory of arms and armour, though one of a period of which many equally interesting examples have been printed, yet contains certain items worthy of notice. The late Mr. Albert Way, in his valuable explanations of similar lists of armour¹ has elucidated most of the expressions to be found in this inventory, and, except where varieties of enrichment or other like peculiarities may be noticed, we shall not repeat his notes.

The head defences here enumerated present varieties all of which are known by name at least to the student of the military equipment of the fourteenth and fifteenth centuries. The bascinets, some with and others without visors and aventails (by which latter term we must for this period understand the camail of mail), present two varieties, namely, the simple conical helmet so universal on monumental effigies and brasses of this era, and two

¹ See *Archæological Journal*, iv. 226-239; xi. 381-388; xv. 354-359; and xix. 159-165.

others described as for jousts of war, that is, serious combats in the lists.

It is worthy of remark that these bascinets are not mentioned as having visors, but "*peses de healmes*" are noted in the same item as if belonging to them. The absence of visors recalls to the observer the curious fact connected with the numerous representations of the bascinet in brasses and effigies, that is, the absence in most instances of any visible mode of attaching the visor. In the full-face figures on brass we might suppose that the pivots, or holes for pivots, of the visors were not seen, being a little behind the greatest breadth of the bascinet; but in effigies which we can examine nearly all round, the same thing occurs. It may be said that in the Hastings brass, 1347; the Dijon figure of St. George, 1391; the Mauleverer brass of 1400, and others, the visor is shown, but the general rule is the other way. Froissart mentions that the valiant knight, Sir John Chandos,¹ "*ne porta oncques point de visièr*"; and such may have been the custom with many other warriors of his day, though the particular mention of Chandos seems as if his case was peculiar.

"Ketelhattes,"² according to the Promptorium, were exclusively formed of leather; but in this instance one is clearly of metal milled, for so "*white*" is understood; and the other one, like so many headpieces of former times, was covered with some textile; in this case russet velvet. Another head defence here mentioned, the pallet,³ is also supposed to have been at least originally, as its name implies, of leather, but here it is described as "*de Lumbardey*," evidently, if not of Milan steel, at least from one of the neighbouring centres of armour manufacture. Of the form of these two kinds of helmet we have no indication save that the pallet only had a visor. The three "*healmes p^r joustes de pees*" were doubtless of the type seen in the tilting helm preserved with the saddle of Henry V. in Westminster Abbey, and so often absurdly

¹ Killed in 1370. Froissart, ch. cclxxviii.

² Ten ketelhattes formed part of the equipment of the ship "*The Christopher*" during the years 1369-1375.

They also are mentioned in the wills of Sir Wm. Langford, 1411, and of Nicolas Snypton, 1391.

³ Eight palets, naval outfit 1372-1374.

referred to as one of the casques that "did affright the air at Agincourt."

While speaking of these helmets, which in their earlier appearance were of leather, the "capels de nerfs" of the Dover Castle inventory of 1344 and 1361 will be called to mind,¹ and may perhaps be of the same kind as the *huvettes* which St. Remy tells us were worn by the English archers at Agincourt, and are described as being made of leather with iron bands across them.²

Of body armour, the five pairs of plates³ include some specially noted as for jousts of peace, others for jousts of war. One pair of the latter were gilt; the others were covered, as we generally find them, with velvet. Another pair are described as having formerly belonged to King Edward (III.), and these were covered with blue baudekyn, one of the varieties of the rich brocade stuff in its earlier fashion, woven of silk with threads of gold, though in later days the name came to be applied to plain silks.

The four breastplates are not mentioned as covered with any material. The briganters (the brigandines of the Middle Ages, a brilliantly coloured souple and very universal class of body armour) are, in this inventory, very rich examples, as might be expected considering the rank of the owner. One pair are deserving of special notice, as having the breast and the back (*le pys et le dos*) white, and the lower part, or skirts, covered with blue velvet. It will be noticed that one of the brigandines has sleeves of plate, while another is mentioned as having them without plate. In the fifteenth century we often see miniatures in MSS. of knights wearing brigandines with the arms covered with plate, and the lower part only of the breast and back similarly protected. We may therefore suppose that at the period of this inventory the breastplate, or even the pair of plates, was on some occasions worn over the brigandine.

The three "paunser," the armour for the lower part of the body, are presumably of plate, as they are described as of steel, and a bracer of steel also is mentioned in con-

¹ *Archæological Journal*, xi. 381.

² "Huvettes ou capelines de cuir bouille, et les aulems d'ozières, sur le quelz avoit une croisure de fer." St. Remy, ch. lxxi.

³ Eight pair of platts, of which seven were covered with leather, are mentioned in the outfit of various ships, 1372-1374.

nection with them and the plates with which they were worn. What the bracer was it is not easy to say. The arm defences are called simply "bras." Gussets and voiders are also enumerated, and the explanation of the latter term as "either gussets of mail, or overlapping plates, serving to fill up the spaces, or *vuides*, either at the elbow, or the knee joints," as given by Mr. Way,¹ must stand as the only meaning our present knowledge allows us to attach to the term. Still, the two expressions occurring in one item mark that there was some distinction between them.

For the protection of the upper limbs there are *vant bras* (*avant bras*), *rerebras*, *gantz de plate*, and *maindefers*. Some of the plate gauntlets were gilt, and garnished with latten or brass. The maindefer, which in the sixteenth century occurs so often as manefaire, was the strong and simple mitten gauntlet for the bridle hand.

The leg defences are somewhat various; for besides the *legherneis entiers*, which would cover the front of the thighs, the knees, and the whole of the lower leg, we have some called *forherneys*. These were probably only for the front of the leg, and resembling the "schynbaldez" of Archbishop Bowet's inventory, 1423.² In that document we have "vamplattes" given as an alternative name for these "schynbaldez," and the same word occurs in the present inventory, where they are noted as for the lists.

The *coler d'asser* would be the plate gorget, which, at the end of the fourteenth and commencement of the fifteenth century, superseded the camail of chain mail, and the introduction of which affords such a guide in determining the date of effigies.³

Of chain-mail armour, there are three habergeons of small-linked Lombardy make, and four others described as old. There is also one pair of mail chausses, or coverings for the legs.

The sabatons were the armed coverings for the feet, which at this period were separate from the leg defences, of which in the early sixteenth century they so often, if not always, form a part, the back portion of the greave

¹ *Archæological Journal*, iv. 230.

² *Testamenta Eboracensia*, iii. (Surtees Society 45) 69-85.

³ *Archæological Journal*, xix. 164.

being continued down to the lower part of the heel; while in the second half of that century the articulations at the ankle still constitute the solleret as a part of the leg armour.

In connection with the foregoing armour should be noted the three surcoats of arms described as good and rich, with the arms of the noble owner embroidered on them. The estimated value of the three at £20, while the richest brigandine is set down at 66s. 8d., will give some idea of the costliness of such additions to the military costume of this period. The similarly embroidered pennon, and the trapper for the horse, are also valued together at £20. Other trappers, banners, standards, pennons, guidons, and pennoncels also occur, but their value is insignificant. A bastard saddle for jousts of war, embroidered and gilt, appears to have been equally inconsiderable.

The weapons comprise several Bordeaux blades more or less richly mounted and scabbarded; but a Scottish sword is an unusual item. Some of the swords are mentioned as long, others short, some for war, others not so particularised.

Among other weapons we may note baselards, one with a Bordeaux blade; several daggers, of which one was for the lists, and an Irish short knife with a roebuck horn handle with silver gilt furniture.

Among the lance heads, a large one of Bordeaux steel is mentioned, and one for boar hunting.

The remaining portion of this part of the inventory enumerates a variety of *covertures*: carpets, sheets, mantles, hats, and odd remnants of fabrics.

A *coverture* of "appelblu" refers to a stuff or a colour evidently in vogue at this period,¹ for there is a furred gown of this description noted in the will of John Percehay, of Yorkshire, 1391.²

Two *mantels corked* are mentioned, but what the qualifying word means we do not know.

¹ In Miscellanea, Q.R. 109, some of the armour and arms are noted as received for the King. The values in some cases differ, and "a graunt Glaiffe" is mentioned.

² "Unam togam de appilblome, furatam cum foygnes." *Testamenta*

Eboracensia, i. (Surtees Society 4) 164. There is an entry in the expenses of the Great Wardrobe of two whole pieces of appelblome as being supplied for the use of Edward III's daughter Joan in 1348.

A piece of cloth stained, of red with white deer, may have something to do with Richard II's badge of a white hart lodged.

Hassocks occur with cushions. A beaver hat is interesting,¹ but one of the most curious items is the lavender satchel.²

The "chequer de cokyle" was probably a chess or draught board inlaid with mother-of-pearl, which also ornamented a *table de ij foyles*, or backgammon board, or its equivalent in those days.

The values being attached to the various items give an extra interest to this collection of military and civil objects which is not to be found in the bare mention of them.

The whole of the duke's armour, together with that of Richard, earl of Arundel, and of Thomas, earl of Warwick, was ordered to be sent to the Tower by a writ of privy seal directed to the Treasurer and Chamberlains of the Exchequer, dated 7th November 22 Richard II (1398).³ The armour was delivered by "Stephen atte Freth armurer notre sire le Roy" to Johan Torre 3rd May 22 Richard II (1399).

The following is the full text of the inventory :

Ceste endenture de sys peeys attachez ensemble fait pentre les Tresorier Denglet^{re} t Chambleins del Eschequer n^{re} s^r le Roy dune part et Clement Spice Eschetour n^{re} dit s^r le Roy en les Countees Desse^x t Hertford daut^r pt tesmoigne q^{le} le dit Eschetor p vertue dun brief de la Chauncellerie n^{re} s^r le Roy a luy directez ad deli^ule^s le xiiij^e iour de Decemb^r lan n^{re} dit s^r le Roy de son regne xxj as dit^s Tresorier t Chamberleyns al oeps n^{re} dit s^r le Roy di^ules biens t chateux q^{ux} nadgaires fuirent a Thomas Duc de Glouc^r t q^{ux} le dit Eschetour troua en le Chastel de Plecy en Esse^x. t les seist es mains n^{re} dit s^r le Roi p v^{er}tue dun aut^r brief t a cause dun jugement count^r le dit Duc rendu^s en parlement tenu^s as Westm^{on} lan suisdit les qu^x bas t chateux t la value dicelles sont contenu^s en ceste endent^e en man^{ere} come ensuyt

¹ "1 capell de be^{er}e sengl." and "1 capell de be^{er}e furur de xxii dors de ris" occur in the Wardrobe Accounts of Edward III. for 1348.

² "1 littil pellow of Grene sike full wythin of Lavendre," occurs in the

Fastolfe inventory 1459. See *Archæologia*, xxi. 256.

³ *Kalenders and Inventories of the Exchequer*, collected and edited by Sir F. Palgrave, K.H. (London, 1836), iii. 307.

Drapz	} En primes un ground piece de Aras	
de Aras.	} florissez dor de Cypre de lestorie de Charlemayn cont xxiiij. verge en long ^{re} t iiij. verge dj en pfound p ^{is}	xlviijti xijs
Item un pece de Aras sanz or de lestorie de dit Charlemaigne cont en long ^{re} xv verge t en pfound iiij verge iiij q ^a p ^{is}		ixti iij ^s iiijd
Item un pece Daras de lestorie Godefrey de Boilloñ florissez de la gayn de la Citee de Jerusalem cont en long ^{re} xx verge t en pfound iiij verge dj p ^{is}		xlvi.ti
Item un pece Daras sanz or duu Estorie dam ^{res} cont en long ^{re} xiiij ver ^g dj t iiij ver ^g en pfound p ^{is} ...		xviiijti
Item un pece Daras sanz or de lestorie de Roy Ramyliaux dun bataille de Fryse cont ix verge en longu ^r t iiij verge j q ^a pfound p ^{is}		ixti xiij ^s iiijd
Item un pece Daras florissez dor de lestorie de Seint George cont x verge en longu ^r t iiij verge pfound p ^{is}		xiiijti vj ^s viijd
Item un pece Daras sanz or de lestorie dun assaut fait as Dames en un Chastel cont ix verge long ^g t iiij verge j q ^a pfound p ^{is}		ixti xiij ^s iiijd
Item un pece de drap Daras sanz or de la bataille entre Gamlayn t Launcelot cont en long ^g vij. verge t en pfound ij verge dj. p ^{is}		cxvj ^s viijd
Item un pece Daras sanz or de lestorie de Geras filtz au Roy de ffryson coment il fust fait chevaler pur fait darmes cont x. ver ^g long ^g t iiij ver ^g pfound p ^{is}		x.ti
Item un pece Daras florisez dor del estorie de Nativite de n ^{re} s ^r t de la Nativite P ^s entacoñ t Purificacoñ n ^{re} dame cont xj. verge dj en long ^g t iiij verge dj pfound p ^{is}		xxv.ti vj ^s viijd
Item un pece Daras ov ^e ez dor de mesme lestorie cont vj. ver ^g iiij q ^a long ^g t iiij v ^g dj pfound p ^{is}		xvfi vj ^s viijd
Item un pece Daras florissez dor de la Sepulere t au ^t s ymages cont vij. ver ^g dj en long ^{re} t iiij ver ^g j q ^a pfound p ^{is}		xj.ti
Item un veil pece Daras sanz or dun estorie de Justes de pees cont vj ver ^g en long ^{re} t ij ver ^g dj pfound p ^{is}		c ^s
Item un pece Daras veil appellez le lit pillcus cont vij ver ^g en long ^{re} t ij ver ^g dj pfound p ^{is}		c. ^s .
Item un pece de veil Aras de lestorie de Oliphernus coment il myst sege al pucele Judith cont xv v ^g iiij q ^a long ^g t iiij ver ^g q ^a pfound p ^{is}		xvjti
Item un veil pece Daras de lestorie dun descomfiture dun Wodewose ¹ t dun Leoñ t dauts estories cont xiiij ver ^g en longu ^r t iiij ver ^g j q ^a pfound p ^{is}		xiiij.ti
Item xj ver ^g de banker daras en ij pees ordeinez p ^r qnyssons p ^{is}		xxxiiij. ^s .

¹ Wodewose, or woodhouse, a wild man of the woods.

Item xxv v ^g de veit banquer Daras en div ^s peces de ymagerie t ove rolez Amy t Amo's p's ...	lxx.s.
Item xv v ^g de novei aras p ^r bankers en iij peces attachez ensemble de ymagei damo's p's ...	xlv.s.
Item xxxj ver ^g dj de novel banquer Daras en div ^s peces de contenances damo's p's ...	iiij.li. xiijs.
Item iij tapet3 de blu aras ove garters jaune3 cont entr eux en long ^{re} xx v ^g t iij. v ^g pfound p's ...	xij.li.
Item un tapet de mesme snyt de x ver ^g long ^{re} t de iij v ^g pfound p's ...	ix.li
Item v tapitz de viij v ^g long ^{re} t iij v ^g pfound p's ...	iiij.li. xviijs
Item vij tapitz de vj v ^g long ^{re} t iij v ^g pfound p's ...	lxxij.s.
Item iij tapitz de mesme suyte cont entre eux en long ^{re} xxv v ^g dj t iij v ^g pfound p's ...	xv.li. vjs
Item iij tapitz de mesme suyte cont xxij v ^g en longur t iij v ^g pfound p's ...	xiiij.li. xvj.s
Item div ^s peces de banquer Daras cont en long ^{re} entre eux xxxviij v ^g dj t de pfound ascuns de iij v ^g dj ij v ^g dj & ij v ^g j q ^a p's ...	xj.li viijs.
Item xxj v ^g dj en iij pe ^c de blanc Aras poudrez de aungels en blu cloudes ove scriptures de Th u misrere line3 de drap linge cont iij ver ^g dj en pfound p's ...	x.li. xix.s
Item un pece de mesme suyte cont en long ^{re} xj v ^g t en pfound iij v ^g nient line3 p's ...	vj.li xijs
Tapicerie. Item un blanc Sale de tapicerie cest assavoir un dossier t iij peces de costers oev ^{es} de les armes de Roy Edward t de ses filtz ovesq bordurez de rouge t noir pale3 t poudrez de Signes t les Armes de Herford ...	} xx li
Item xiiij tapitz p ^r la chamb ^r de mesme la suyt ovesq un aut ^e petit tapite pris ...	
Lit3 dor } Item un g ^{ant} lit dor cestassavoir cov ^{lit} et de soye. } test ^l t ent celu ^r de fin satyn blu oev ^{es} de garters dor t iij curtyns de Tartryn batu3 de la suyte p's ...	} ciiij.ij.tj. iij.s
Item ij. long ^{re} quyssons t iij squa ^r quyssons du suyte de la lit p's ...	
Item un large lit de blanc satyn embronde3 dor de cip ^r des armes du Du ^c de Glon ^c ove son Healme en le mylien cestass test ^l cov ^{lit} t entier cel' t iij curtyns de taffat batu3 de la suyte p's ...	viiij.li.
Item un lit de noir baudekyn pondrez de blanes roses cestass test ^l cov ^{lit} t ent cel' iij e ^r tins de tartryn batu3 de mesme la suyte t xj quyssons de baudekyn de la suyte p's ...	x.li.
Item viij peces de Tapitz de Tapicerie noir pondrez de blanc roses de la suyte du lit p's ...	xl.s.
Item un large lit veit de vert Tartryn embroudez ove griffo ^{is} dor cestass test ^l cov ^{lit} t entier cel' iij curtyns de tartryn batu3 de roses p's ...	lxxvj.s. viij.d.

Item xij peces de tapites de Tapicerie blu ovesq, blanes roses en les corners ⁊ div ⁹ ses armes p ^s	xl.s.
Item un large lit de blu baudekyn embrondez de huettes d'argent de cip ^r ⁊ fl ^s de lys dor de cip ^r ovesq, vj quyssyns de bandekyn embrondez de mesme la snyte ⁊ iij curtyns de Tartryn batu ³ de mesme la snyte p ^s	xiiij ^{li} vj ^s viij ^d
Item ix tapitz de blu worstede embrondez de huettes ⁊ flour de lis p peell p ^s	xxs.
Item xv peces de Tapitz p ^r ij chaumbres de rouge worsted embrondez de blu garters de worsted ovesq, heaumes ⁊ armes de div ⁹ s' sortz p ^s ...	es
Item un lit de Tartryn plunket embrondez de wode-woses joustans a chival cestass test cov ⁹ lit ⁊ ent ^r cel ¹ sanz curtyns p ^s	xl.s.
Item vj tapitz de worsted plunket embrondez de justers de la snyte av ^{ant} dit ⁊ j tapit p ^r j forme nient embrondez p ^s	xiijs iiiij ^d .
Item un petit lit de blanc baudekyn embrondez de papegayes ¹ cestass cov ⁹ lit test ¹ ⁊ entier cel ⁊ iij. curtyns de blanc tartryn ove papegayes de vert tartryn p ^s	vj.li xiiij iiiij ^d
Item ix tapitz de blanc worsted embrondez de papegayes p ^s	xxvj ^s viij ^d
Item un lit vert de double samyt de mesme assise ove un blu pale de chamelet embrondez ovesq, un pot dor ove j lilie esplaiez ove plusieurs flours d'argent de cip ^r cestass cov ⁹ lit test ¹ ⁊ entier ciel ove iij curtyns plein de Tartryn vert p ^s	cvj ^s viij ^d
Item iij tapitz de vert worsted embrondez de lilies ⁊ iij tapitz de vert worsted pleyn p ^s	xxvj ^s viij ^d
Item un dossier i ij costers de soy vert embrondez de pots blanes i lilies cressantz de soye blanc p ^s	xiiij.li. vj ^s viij ^d
Item j lit de russet de baudekyn linez de bokeram cestass cov ⁹ lit i ent ^r cel ⁊ iij curtyns de russet tartryn	x li.
Item iij tapitz de russet worsted p ^s	xxs.
Item j test ¹ ove j entier cel j curtyn p ^r tout entour le lit blanc tartryn batu ³ de leopdes portanz le signe entour leur col p ^s	xs.
Item un lit de baudekyn blu ⁊ rouge palez cestass test ¹ cov ⁹ lit ⁊ entier cel iij curtyns palez blu ⁊ rouge de tartryn p ^s	xxvj ^s viij ^d
Item j lit de rouge baudekyn veil ⁊ feble cestass test ¹ cel ⁊ cov ⁹ lit p ^s	xl.s.
Item v. tapitz de rouge worsted veil ⁊ febl p ^s ...	vj ^s viij ^d
Item un lit de rouge tartryn raiez dor feble rampn ³ ⁊ de petit value cestass cov ⁹ lit test ¹ ⁊ entier cel ove iij curtyns de rouge tartryn feble p ^s ...	xxxiiij ^s iiiij ^d .
Item vij tapitz de rouge worsted feble ⁊ j feble cov ⁹ lit p ^s	iijs iiiij ^d

¹ papegayes = popinjays, or parrots.

Item un lit de rouge bandekyn cestas test ⁹ cov ⁹ lit ⁊ ent ⁹ cel p's	lxvj ^s viij ^d
Item un veit lit de bandekyn noir ove rouge ovrage cestas cov ⁹ lit test ⁹ ⁊ ent ⁹ ect p's... ..	xxx ^s
Item un veit lit de tartryn vert raiez dor cestas vn test ⁹ ⁊ entier cel ovesq j curtyn pur environer la lit de vert tartryn raiez dor de mesme la suyte p's	vj. ^s . viij. ^d
Item iij tapitz de vert worsted veit ⁊ rumpuz p's ...	ij. ^s .
Lit de Worsted. Item j veit lit de blu worsted embroudez dun cerf jaune worsted cestas test ⁹ dj cel iij curtyns degastez ⁊ de petit value p's	ij ^s iij. ^d .
Item j rouge lit de worsted embrondez dun leon coronez ove ij griffons ⁊ chapellets ⁊ roses cestas cov ⁹ lit test ⁹ dj cel iij curtyns de petite assise p's... ..	vij. ^s
Item un lit de petit assise de worsted rouge embrondez de griffons cestassav ⁹ cov ⁹ lit test ⁹ dj cel ⁊ iij curtyns p's	x. ^s .
Item un lit de blu worsted embrondez dun Egle blanc cestas test ⁹ dj cel cov ⁹ lit ⁊ iij c'tyns veit	vj. ^s viij ^d
Item un lit de rouge worsted embrondez de Faukous cestas test ⁹ cov ⁹ lit dj cel ⁊ iij curtyns veit ⁊ fiebt p's	ij. ^s . iij. ^d .
Item un veit lit rumpuz de rouge worsted cestassavoir test ⁹ cov ⁹ lit ⁊ dj cel iij curtyns p's	vj ^s viij ^d
Item un lit de rouge worsted veile cestassav ⁹ test ⁹ cov ⁹ lit dj cel iij curtyns febt ⁊ degastez p's	vj. ^s . viij ^d
Item ij petitiz cov ⁹ litiz de rouge worsted tacehez ensemble p ^r j large lit veit rūpuz ⁊ degastez p's	xij ^d
Item j cov ⁹ lit j test ⁹ de rouge worsted embrondez dun unicorn p's	v. ^s .
Item j. blu cov ⁹ lit ove j tapyte de blu worsted embroudez dun leon ⁊ roses p's	ij. ^s .
Item j cov ⁹ lit ⁊ test ⁹ de rouge worsted embrondez ove un ley ⁹ er blanc p's... ..	ij. ^s .
Item j cov ⁹ lit ⁊ test ⁹ de rouge worsted embrondez dun leon blanc cochant desouz vn arbre	v. ^s .
Item j. tester ⁊ cov ⁹ lit de blu worsted embrondez dun cerf blanc p's	v ^s
Item j. tester ⁊ cov ⁹ lit de rouge worsted embrondez dun unicorn ⁊ iij curtyns p's	ijj. ^s .
Item j. tester ⁊ j. cov ⁹ lit blu de worsted p's	ij ^s
Item j. test ⁹ ⁊ j. cov ⁹ lit rouge de worsted p's... ..	ij ^s
Item j. test ⁹ ⁊ cov ⁹ lit de blu worsted p's	ij. ^s

Vestm. pro capella } En primes un vestiment de drai⁹ rouge dor de luke ovesq, rayes dasure cestas front frontel ⁊ countrefront ij aubes ij. amytes j chesible ovesq stoles ⁊ fanous j eas corporas ove Orfreys de velvet rouge embrondez de ymages ⁊ coronas dor ⁊ ij ridelt de tartrin rouge p's ... lx^s.

- Item un vestiment de drap̃ dor de Luķe rouge ⁊ blu
palod ovesq testes de pucell¹ veit ⁊ feble cestas-
savoit front ⁊ contrefront ij aubes ij amytes j
chesible ij stoles ⁊ ij fanoūs ij pilewes un corporas
⁊ un tuail de drap̃ linge ovesq Orfreys de
Tabnaeles embrode3 dor cipr̃ xl.ſ.
- Item un vestiment de drap̃ dor de Luķe veit de knottes
⁊ chapelletts de troifoils cestas̃ front ⁊ contre-
front ovesq vn crucifixe ⁊ Marie ⁊ Johñ dor de
cipr̃ ij aubes ij amytes ij stoles ij fanons j chesible
ovesq lorfre noir oev²3 doiselx dor j corporas j
tuail j. pelow ⁊ ij curtyns rayez de blu ⁊ blanc
pris xx.ſ.
- Item un vestiment de baudekyn rouge poudrez de
Signes ovesq orfreis dor de damask cheqere3
cestaſ̃ front frontel ⁊ contrefront iij copes j
chesible ij tonicles ovesq stoles ⁊ fanoūs ⁊ parures
pur iij aubes ⁊ iij amytes j pelewe ⁊ ij amytes pris
lxvjſ. viij.đ.
- Item un entier vestiment de Sarsinet blanc raiez dor
cestaſ̃ front ⁊ contrefront ⁊ frontel un drap̃. p^r
le leytron ij ridell ⁊ parures p^r ij. aubes ⁊ ij
amytes ij tunicles .j. chesible ovesq stoles ⁊
fanoūs iij copes [fielbes] ovesq orfreis de noir
drap̃ dor de Luķe ⁊ j celur p^r le auter pris ... xxvjſ. viijđ
- Item un vestiment de baudekyn noir ovesq ov²ages
de jaunes cestaſ̃ iij aubes ⁊ iij amytes ovesq
stoles ⁊ fanons j chesible ovesq lorfrey blanc
ov²ez de griffoūs pris xl.ſ
- Item un drap̃ de rouge velvet embrode3 dun ymage
de seint George p^r j tablet p^r le auter pris ... xiijs̃ iiijđ
- Item un novel vestiment de drap̃ de bokasyn blanc
rayez ovesq orfreys ⁊ bordure3 de rouge baude-
kyn ovesq scriptures de **¶**hesus **¶**pi cestaſsavoit
j front ovesq đj cel j contrefront ⁊ un frontel
j chesible ⁊ parures p^r ij aubes ⁊ ij amytes ⁊ ij
curtyns de tartaryn blanc ⁊ stoles ⁊ fanons j.
corporas ⁊ j. pelewe de drap̃ dor blanc pris ... 1xſ.
- Item un vestiment de blanc baudekyn ovesq roulles
t escript³es de **¶**otre cotuma ovesq cresses
rouges de drap̃ de soye cestaſsavoit front ⁊ contre-
front ij ridell j tuail j. frontel j chesible ⁊
parures p^r ij aubes ⁊ ij. amytes j corporas ovesq
le cas j pelewe de rouge drap̃ dor Itm v chesibles
ove parñ p^r v aubes v amytes ove stoles ⁊
fanoūs de fustien [raiez pris] iiij.li. xſ
- Item un vestiment blanc satyn cestaſ̃ ij frontes
attachez ensembt lnn de baudekyn blanc ovesq
le noun de **¶**he rouge laut̃r de satyn blanc ovesq
une rouge croys ⁊ j aut̃r pece de drap̃ dor veit
attachez a yeel un contrefront ⁊ frontel j. tuail
j. lectronaĩ iij chesible3 doũt ij. caseles ovesq

¹ Testes de pucell = maidenheads.

parures p ^r iij aubes ij stoles ij fanoūs j corporas ovesq un cas. j pelewe ij. curtyns de tartryn ovesq rouge crosse3 batuz pris	xxxiijs. iiijđ
Item un veile pur une chapelē de ij peces novell chesun ovesq un g ^{ant} eros de tartryn rouge ʔ un eel pur un anter de drañ linge ovesq un large eros batuz pris	xl.s.
Item un veil vestiment blanc de tartryn ovesq rouges cresses de tartryn cestas front ʔ contrefront j tuail ovesq j frontel j chesible ij curtyns ʔ parures p ^r ij aubes ʔ ij amytes ij pelewes j de satyn ʔ un de drañ blanc .dor. ʔ ij large curtyns blanes de tartryn ovesq cresses ʔ j celure de mesme la suite pris	xiijs. iiijđ
Item un sngle vestiment de tartryn rouge ʔ noir rayez cestas un front j. contrefront ʔ j. frontel ovesq le dj eel j chesible ʔ parures p ^r ij. aubes ʔ ij amytes j. stole j. fanoū ovesq j. cas p ^r un corporas .j. lectronarie ij curtyns ʔ viij aubes ʔ viij amytes sanz parurs p ^r s.	š xiiij. viijđ
Item ij copes de drañ blu dor de cipr ov ^{ez} de signes dor ovesq orfreys de rouge drañ dor ovesq griffouīs dor de cipe pris	lx.s.
Item ij copes de drañ dor de cipe pte3 rouge ʔ noir ovesq orfreys de drañ blu dor ovesq signes pris	lxxiijs. iiijđ
Item un blanc cope de sars3inet pondrez de garters ovesq lorfrey de drañ dor [de lukē febt ʔ puse3] pris	x.1s. ijđ.
Item ij copes de drañ dor rouge de cipe pondrez doiselx dor ovesq orfreis cheqerez de velvet ...	x.s.
Item j cope de drañ dor rouge ovesq chapeux blanes ʔ bysses dor ovesq orfreis cheqerez pris... ..	xx.s.
Item iij copes de drañ dor de cipe le chamf de satyn rouge pondrez ove fankoūs ʔ fesants orfreys drañ dor blanc ove signes dor pris	vj ti
Item iij copes de drañ damask blu ove orfreys de rouge damask dor prys	cvjs viijđ
Item ij. copes de camaka rouge ov ^{ez} de noir ove orfreys de velvet cheqere pris	xlš
Item iij copes de sars3inet vert rayez iij copes de tartaryn jaunes j cope de blu tartryn pondrez ove cressants dor pris	v. m ^{ar} c
Item v copes ij tonicles j. chesible iij aubes iij amytes j stoles ^{le} ij fanoūs un front un contrefront un frontel ʔ un lectronarie de drañ blanc dor pondrez de leonceux dor ovesq orfreys de velvet rouge ʔ noir embrondez de fres ʔ garters j. tuail de drañ linge pur le anter j pelewe j corporas de blanc baudekyn de damask ʔ les capons des copes embrondez des armes de Duē de Glouē prys ...	xx ti

- Item j veil cope de draþ blanc dor de cipre de leons
t oiseulx en cloudes ovesq le orfrey t chapoñ
embrondez de ymages pris xl.š.
- Item j frontel de rouge velvet embrondez p my de
ples t dor de cipre ove ymages t flour de lys
pris v m^{ar}e3
- Item un tuail ove j frontel dor embrondez oev²e3 de
ymages des Apostels t les armes de Henaud t
Dengleire florissez de ples p pcelt pris xiijs. iijd
- Item un fin frontel de iij verġ dj long dor embrondez
des ymages t agnelx de ples t compas de ples dor
embosse3 ove j. tuail pris xl.š.
- Item iij copes j chesible ij tunicles iij aubes iij amytes
ij. stoles t iij fanons ovesq orfrey3 de rouge velvet
embrondez ove flours t estoill dor de cipr tout de
blanc baudekyn de damask pris xx m^{ar}e3
- Item iij copes de blanc baudekyn de damask doūt iij
ove orfrey3 de velvet rouge embrondez de ymages
en Tabernacles t le quart ovesq j orfrey dor
de cipr t ymages t tabnacles t sbien oev²e3
pris xvj m^{ar}e.
- Item un entier vestiment cestassavoir v copes j chesyble
ij tunicles iij aubes iij amytes ij stoles iij fanoūs
de fin draþ rouge pondrez dor de cipr desteuill le
champ de baudekyn dor ove orfrey3 de draþ dor
de cipre blanc ovesq front t contrefront de la
suyte pris. xl.ti.
- Item un entier vestiment de draþ dor de cipre. le
champ de baudekyn noir t rouge t arbres dor t
de lures blancs ove orfrey3 de draþ dor de cipr blu
cestassavoir v copes j. chesible ij tunicles iij
aubes iij amytes ij stoles ij fanons j frontel j.
front j. contrefront ove j. tuaille pris xl. m^{ar}e3.
- Item j cope de velvet rouge embrondez de condites
dor de cipre ove lorfrey de blu velvet embrondez
de scriptures de **¶** pris... .. xl.š.
- Item j cope de draþ de rouge baudekyn dor de cipre
ove leopdes dor ove rolles en la bouche escript
¶ magh nrt ove lorfrey dor de cipre oev²e3 de
ymages embrondez pris v. m^{ar}e3
- Item iij copes dor de cipr le champ rouge pondrez de
divses bestes t oisieux dor t orfreis de large
ryban. dor de damask t bordures de fin draþ
blanc dor de cipr pris xx.ti
- Item un cope de velvet motle le champ noir pondrez
de chapeux t doiseux ove lorfrey de ryban de
damask dor pris vj m^{ar}e
- Item ij copes j. chesible t ij tonicles t parure p^r. iij.
aubes t iij amytes ij stoles t iij fanons de draþ
dor de cipr. le champ blanc ove cerfs t floures dor
ov orfreis noblement embrondez dor de cipr t
ymagerie pris x ti.

- Item j cope de velvet rouge fin embrondez ove cerfs
blanc gisantz en chapellet dor ove. j. orfrey dor
de cipr. embrondez de ymages pris viij.li.
- Item un fin cope de blu oev⁹e3. ove div⁹ses bestes ⁊
oiseux ove frettes de de ples ove garters escripts
de *Wony soit qi mal pñst* ove orfreys de drañ
dor de cipr embronde de ymages line3 de satyn
pris lx.li.
- Item un. bone cope dor de cipe. p tout oev⁹e3 de
compassez ⁊ estories de ymagerie de la passioñ ⁊
aut^s line3 de noir bokeram pris e m^are3
- Item un front dor de cipr embrondez ove .x. large
ymages curiously cont iij. verç j q^a. long ⁊
de j verç j q^a pfound pris lx.li
- Item un autre front dor de cipe p tout oev⁹e3 ⁊
embrondez de la passioñ nre s^r p^s lx.li
- Item iij copes un chesible ij tonicles iij aubes ij
amytes ij stoles ij fanous ove front frontel ⁊
contrefront de d^ap de baudekyn blanc ov⁹e3 de
rouge floures ⁊ best p^s x.li
- Item iij sengt vestimentz novelx de drañ rouge dor
de Luk ove orfreis de velvet raie3 ⁊ cheeqere3 dor
p^s xl.s.
- Item ij chesibles de baudekyn noir ove rouge t^ov⁹ages
ove paru^r p^r ij aubes ⁊ ij amytes ove stoles ⁊ fanons
pris xx.s.
- Item ij chesibles de blanc tarferin ove rouge crosses
⁊ paru^rs p^r ij. aubes ⁊ ij amytes ove stoles ⁊
fanons ⁊ ij caseles de mesm la suyte pris xx.s
- Item ij chesibles lun de blu damaske ⁊ laut^r de baude-
kyn ⁊ paru^rs p^r ij aubes ⁊ ij amytes ove stoles ⁊
fanons ove ymages de Marie ⁊ Johñ ⁊ ij cruci-
fixes p^s xx.s
- Item un sngle vestment novel de drañ dor de Luk le
champ vert cestas j chesible ij. aubes ij amytes
ove paru^re ij stoles ij fanoüs j. pelewe j frontel
ove j. tuail j corporas ove j cas ove froüt ⁊ con-
trefroüt ⁊ les orfreys de rouge drañ de luk p^s viij.li
- Item un sngle vestment de rouge drap dor de cipe
ov⁹e3 de bisses dor cestas j. chesible ij aubes ij.
amytes ij stoles ij fanoüs j front j contrefront j
frontel ove j. tuaille j corporas ove j. cas ⁊ j pelewe
⁊ lorfrey de le chesible de blu tartryn embrondez
de ymages ove ij curtyns de tartryn rouge
pris v m^are3
- Item un sngle vestment de drañ dor de cipr blanc
oev⁹e3 [de] bestes dor cestas j. chesible ove
lorfrey de noir drap dor ij stoles ij fanons ij
aubes ij amytes front contrfront ove j tuaille ⁊
j frontel de noir velvet embrondez de testes em-
bossez de leopdes dor de cipr ⁊ ij curtyns de
tartryn blanç [febles ⁊ puses] p^s xxvj. viij.d

- Item un sngle vestiment de draḡ de damasq
plunket cestas̃ nn chesible ove un orfrey
rouge draḡ dor de Lukes ij aubes ij amytes
ij stoles ij fanoūs j tuaille ove j frontel j front
t contrefront ij emtyns de tartryn plunket
p^{is} x m^ar₃
- Item un sngle vestiment de velvet raie₃ dor de Luk
cesta^{s̃} j chesib^t ij aubes ij amy^t₃ ij stoles ij
fanoūs j tuail ove j frontel j front t contrefront
ove j pelew un corporas en un cas t
le orfrey du chesible de vert draḡ dor de Luk
p^{is} xl.s.
- Item un sngle vestment de haudekyn damask blu
cesta^{s̃} j chesible ove lorfrey de draḡ dor de
troifoilx de cipr ij aubes ij amytes ij stoles ij
fanoūs j tuaille ove j frontel j front t contrefront
un corporas en un cas j pelewe t ij eurtyns de
tartryn blu pris v. m^ar₃
- Item un chesible de draḡ dor de cipr pte₃ blu t rouge
ov^e₃ de bestes t flours ove. un orfrey dor de cipr
embronde₃ de ymagerie j aube j amyte j stole
j fanon pris lx.s̃
- Item un corporas ove j large cas embronde₃ de
ymagerie de la salutacon t de la Nativite ov^e₃
de draḡ dor de cipe poudrez de petit ples line₃
de drap dor p^{is} x^{s̃}
- Item un corporas en un petit cas lun coste embronde₃
dor de cipr ove la coronacon p^{is} iij.s̃.
- Item xvj copes dun suyte de drap dor de cipr le
champ blu poudrez de leopdes dor de cipr ove
orfreis de draḡ dor de cipr le champ rouge ov^e₃
de flours t foils p^{is}... .. xx ti.
- Item xvj copes de draḡ blanc dor de cipr poudrez
doiselx ove orfreis de rouge draḡ dor de cipr
poudrez de flours t foils p^{is} xx ti
- Item un enf vestment de velvet rouge ove orfreis de
velvet noir embronde₃ ove ymagerie en Tabnacles
cesta^{s̃} front t contrefront t frontel de v. v^g long^e
ove j tuaille j chesible ij tunicles ij casels iij
aubes iij amytes ij stoles iij fanoūs t iij copes
tout dun suyte xx.ti
- Item un vestment de draḡ dor de Lukes ove aungels
dor t archaungels de rouge cesta^{s̃} front t contre-
front j chesible ij tonicles iij aubes iij amytes ij
stoles iij fanous .j. corporas en un cas j pelewe iij
copes ove orfreis de draḡ dor rouge de Lukes
ov^e₃ ove aungels t archangels dor tout dun suyt
t j. frontel de velvet blu embronde₃ ove aguels
[sic] t corous dor p^{is} xl m^arc₃
- Item xxi copes de haudekyn rouge t blu raye₃ ovesq
un damisse de noir ove orfreis de draḡ dor de
cipr poudrez de leou^s dor p^{is} xl ti

Item xj copes de baudekyn blane ove ofrseis de rouge drap dor de Lukes ov ^e 3 de Cokkes dor ʔ de flours p ^s	xviij. ii
Item ij dalmatikes de blu satyn double ove rybans dor de Venise ʔ ij dalmatikes de draḡ blane dor ove ryban de damask ij mytres de blane baudekyn de damask garnise3 ove ryban dor de damask j peir de sandalyns ʔ j peir de sabatons de draḡ dor ove j peir de gant3 use3 pur evesques p ^s	viiij. ii xxvj ^s viij ^d xiiij ^s . iiij ^d
Item iiij amyses de grys furr ^d de menyver pris ...	
Item vj. surplises entre bons ʔ mals de draḡ linge p ^s	
Item un surplis de lawne j petit tuail de Reynes p ^r j auter ovesq ^s j erosse noir ʔ vj. auts tuailt de reynes pluis gros3 ʔ vj. tuailt de linge draḡ use3 p ^r les auters ʔ ij curtyns de taffat rouge ʔ noir pale3 p ^s	xiiij. s. iiij ^d
Item un tuailt de blane soy ovesq ^s les bordure3 raie3 de vij verḡ long ³ ordeigne3 p ^r le maunde ʔ j tuailt p ^r les reliques p ^s	vi. s. viij ^d
Item un lectran de draḡ frise ʔ crispe soleyu ʔ un cas p ^r j corporas de blu drap damask p ^s	vj ^s viij ^d
Item un lectron de velvet chequere3 dor ʔ j. celur de tartryn blu raye3 dor linc3 de noir carde ʔ ij curtyns de tartryn raye3 dor veil ʔ febl p ^s ...	ij ^s .
Item un travers p ^r un auter de tartryn de Inde blane de viij verḡ long ³ ʔ ij verḡ d ^j pfound ³ ʔ ij sudaries de iiij peeces attache3 ij ʔ ij ensemble3 ʔ ij auts petitz sudaries p ^s	xxx ^s . xiiij. s. iiij ^d
Item un fiertre fait de draḡ rouge dor ove frenge de blu soy p ^r le feste de corpus Xpi p ^s	
Item un frontel p ^r j auter de noir velvet embronde3 desteilt ʔ de tres p ^s	xxvj ^s viij ^d
Item un front ʔ j contrefront de satyn [blane] desteine3 de la passion ʔ de les v joyes de nre dame ʔ j draḡ linge depeinte3 de rouge contre- fait draḡ dor ovesq ^s j pite de Jhu Crist ove iiij ymages p ^s	xxvj ^s viij ^d
Item xxxvij d ^{aps} dor de Lukes appelle3 Ragomas de div ³ s sort3 [veil ʔ puse3] p ^s xx m ^r 3 viij draps dor de Lukes de div ³ s sortes appelle3 sielatoũs p ^s xiiij. iiij ij draḡs dor de Lukes appelle3 Ragomas pri3 iiij ^s viij ^d et vj. peč de remeñ de baudekyn ʔ j remeñ dor de Luč p ^s xiiij ^s iiij ^d . ʔ sm ^a ...	xiiij ^h xviiij ^s
Item j tablet de ij foils embronde3 dor de cipr ove une crnefixe ʔ la coronacōn florisse3 de perles p ^s ...	vj ^s viij ^d .
Item iiij tablette chescun de iiij foils depeinte3 de div ³ ses ymages p ^s	x. s.

¹ These grey "amyses" (*almucia*) amices or "amytes" (*amictus*) worn at must not be confounded with the mass.

Item un bible de mesne volum ove elaspes dargent p ^{is} ...	lxvj ^s viij ^d
Item iij larges liyres cov ^{es} de blanc quy ^r ove elaspes de latoñ cont entre eux la bible p ^{is} ...	x. li
Item j bible de mesne volum bien escrip ^t cov ^{es} de dra ^p dor de cip ^r ove ij elaspes dor enamail ^{es} blanc p ^{is} ...	e. s.
Item un bible de petit volum cov ^{es} de vert quy ^r veit ove ij elaspes dargent p ^{is} ...	xxvj. s. viij ^d
Item un large missale novel de velym bien escrip ^t ⁊ eslumine ^{es} cov ^{es} de blanc quy ^r ove ij elaspes dargent endorre ^{es} p ^{is} ...	vj. li.
Item j large missale novel de velym cov ^{es} de blanc quy ^r ove elaspes de latoñ p ^{is} ...	vj. li.
Item j aut ^r missale vse ^{es} cov ^{es} de blanc quy ^r ove elaspes de latoñ p ^{is} ...	lxvj ^s viij ^d
Item j missale bien eslumine ^{es} dor cov ^{es} de blanc quy ^r ove elaspes dargent p ^{is} ...	iiij ^{ti} xiiij ^s iiij ^d
Item j missale de mesne volum cov ^{es} de blanc quy ^r ove elaspes dar ^g endorre ^{es} p ^{is} ...	vj ^{ti} xiijs iiij ^d
Item j portos de mesne volum cov ^{es} de chev ^{el} rouge ove ij elaspes dar ^g endorre ^{es} p ^{is} ...	xl. s.
Item j portos veit plus petit cov ^{es} de veit velvet ove j clasp ^{es} dargent p ^{is} ...	xx. s.
Item j portos veit note ^{es} cov ^{es} de blanc quy ^r de mesne volum p ^{is} ...	xiijs iiij ^d
Item j large portos novel sanz note cov ^{es} de blanc quy ^r ove elaspes de latoñ p ^{is} ...	vj ^{ti} xiiij. s. iiij. d
Item j large portos note ^{es} cov ^{es} de blanc quy ^r ove elaspes de latoñ p ^{is} ...	vj. li xiijs iiij ^d
Item j portos de mesne volum note ^{es} cov ^{es} de blanc quy ^r veit p ^{is} ...	xiiij. s. iiij ^d
Item j g ^{ant} portos note ^{es} cov ^{es} de blanc quy ^r ove elaspes dar ^g p ^{is} ...	e. vj ^s viij ^d
Item j large antiphoner note ^{es} cov ^{es} de blanc quy ^r ove elaspes de latoñ p ^{is} ...	lijs iiij ^d
Item j large antiphoner note ^{es} cov ^{es} de quy ^r blanc ove elaspes de latoñ p ^{is} ...	e. s.
Item j large antiphoner note ^{es} ⁊ bien eslumine ^{es} cov ^{es} de blanc quy ^r p ^{is} ...	iiij. li
Item j veit greyel de mesne volum cov ^{es} de blanc quy ^r sanz elaspes p ^{is} ...	xiijs iiij ^d
Item j veit greyel de petit volum cov ^{es} de blanc quy ^r ove elaspes de latoñ p ^{is} ...	vj. s. viij. d
Item j. petit greyel veit cont un sequensai ^r ove elaspes de latoñ p ^{is} ...	vj. s. viij. d
Item j legend large de pchemyn ove rouge cov ^{tonr} desoile ^{es} p ^{is} ...	lijs iiij ^d
Item j petit santer veit cov ^{es} de rouge quy ^r p ^{is} ...	iiij. s.
Item j petit sauter ove les tables dargent en un cas de quy ^r boilt rouge p ^{is} ...	vj ^s . viij ^d

Item j veile santer de mesne volum del escriptur de Frannee p's xx.đ	
Item j veit sauter glosez dengleis p's xxđ	
Item j veit sauter chescun psalme escript trois foitz p's ijs	
Item j veil sauter glosez de latyn cov'e3 de rouge p's	iijs. iiijđ
Item j veit sauter del escriptur de Frannee cov'e3 de blanc p's ijs.	
Item j sauter bien escript ⁊ esclumine3 ove claspes dargent endorre3 p's xiijs iiijđ	
Item j sauter de mesne volum bien esclumine3 ove j clasp dargent p's xiijs iiijđ	
Item j livre appelle3 pontifical cov'e3 de blu bandekyn de damask ove claspes dargent endorre3 p's xl.s.	
Item j quaveñ cont j pontifical portatif ove j rolle de confirmacions ⁊ auts offices devesques p's vjs viijđ	
Item j livre de div's s'vices note3 cov'e3 de quy'r ove cortres claspes dargent p's xxvjs iiijđ	
Item un marteloge de mesne volum sanz cov'tur p's	iijs iiijđ
Item un Manuel novel cov'e3 de rouge quy'r p's xx.s.	
Item un livre del s'vice du salutacōn Marie ⁊ Elizabet̃ p's xx.đ.	
Item un petit livre de div's orisons cov'e3 de velvet noir ⁊ rouge embronde3 de signes pris vjs. viijđ	
Item un veil sauter note3 p's ijs	
	ex ^a
Fasa argent. Item iij bassyns dauḡ pois p la pois troie xiiij lb đj ij unc p's la lb xxviij s xixti ijs viijđ	
Item iij eawers dargent dont j enorre3 sanz cov'ele pois iij lb ij unc meins p's la lb come desuis cvijs iiijđ	
Item ij potelpotte ij q'r̃i dont iij sanz cov'ets pois viij lb ij unc meins xijti xjs iiijđ	
Item iij chargeo's pois p mesme le pois ix lb iij unc p's come desuis xijti xix.s.	
Item vij plats pois p mesme le pois xlb v.unc p's xiiijti xjs viijđ	
Item vj esquels pois p mesme le pois vij lb đj j unc đj p's xti xiijs vđ	
Item xj saucers pois p mesme le pois v lb j unc meins p's vjti xvijs viijđ	
Item ij salers dauḡ dont j endorre3 ove ij cov'eles pois iij lb j unc meins p's... .. cixs. viijđ	
Item v pec̃e de novel forme pois viij lb viij unc p's xijti ijs viijđ	
Item x pees de div's faceon dont iij cov'e3 pois ix lb vj unc ⁊ đj p's la lb come desuis xiiijti vjs iđ	
Item ij chandelleurs dargent pois iij lb iij unc đj. p's	vj. ti iđ
Item j mazer lie3 dargent ovesq j cov'ele ⁊ j pe dar- gent ⁊ endorre3 pois j lb đj ⁊ iij unc p's ijs iiijđ	
Item x quillers ¹ dargent pois viij unc p's xvijjs viijđ	
Item j cov'ele pr j pot enfrent pois v unc iij đ meins p's xjs vđ	

¹ *I.e.* spoons.

Item j halywaterstopp ove j estrinkel dargent en-	
dorre3 pois iij lb ij unč đj p's	iiijti ixš xđ
Item j senser ove iiij cheynes dargent j neef ove	
j quiller p peelt enorre3 pois iij lb đj	iiijti xviijs
Item ij eruettes j eonnette dargent pois vj unč vđ p's	xiiijš. vđ
Item j chalys p tout endorre3 pois ij lb ij unč p's la lb	
xxxiijs iiijđ	lxxijs ijđ
Item j cov ^e le p ^r j g ^{ant} maszer endorre3 ove j leon	
sur le pomelt pois xj lb p's lb xxxš	xvjti xš
Item j large maszer cont iij galons lie3 environ darg	
endorre3 embosse3 en le fond3 pois viij lb v unč	
p's la lb xxš	viiijti viijs iiijđ
Item j g ^{ant} pee endorre3 par le dit maser pois vj ti	
v unč đj p's la lb xxxš p's... ..	ixti xiijs ixđ
Item j. ewer. darg rampu3 ovesq la cov ^e le pois j lb pris	xxvijs
Item un large almesse dissh a guyse duu nief pois x lb	
p's le lb xxvijs.	xiiijti
Masses p^r scr^e } Item ij masses de baleyn hertiš	
geants t cornes. } dargent lun en un cas p's ...	xiijs iiijđ
Item v cornes g ^{ant} z t petit3 hertiš dargent t endorre3	
pris	xlš.
Item un gipser de blanc teit ovesq ij anelx dargent	
p's	x š
Item un masse de berille garnise3 dargent endorre3	
ovesq ymages t bones ov ^{ages} en un cas de quyr	
boilt pris	xlš.
Libres de div^{es} } Item un livre de mesne volum de la	
rimances t } Rimance de la Rose p's ...	vj.š. viij.đ
Estories. } Item un bible en Engleys en ij g ^{ant} z	
livres cov ^e 3 de rouge quyr p's	xlš
Item un livre de ij g ^{ant} z volumes en fraunceis de	
Titus Livius cov ^e 3 de rouge quyr p's	xlš
Item un gross liv ^e en latyn de cronicles des Popes p's	xxš
Item un petit livre en Latyn q comence fruy en latyn	
de questions de Divinite cov ^e 3 de rouge quyr p's	xijđ
Item un g ^{ant} livre en Fraunceis de les vij sages. p's...	xx.š.
Item un livre cov ^e 3 de blanc quyr appelle3 vages-e de	
Chivalrie ove elaspes dargent p's	iijs. iiijđ
Item un livre Dengleis de les ev ^{angelies} cov ^e 3 de	
quyr rouge p's	vjs viijđ
Item un g ^{ant} livre cov ^e 3 de blanc quyr de Ector	
de Troie	xš.
Item un petit quayer cov ^e 3 de drañ dor dun Kalendre	
de les Chapitres del bible versifie3 p's.	xijđ
Item un livre en Fraunceis de miracles n ^{re} dame p's	xij.đ
Item un livre en Fraunceys appelle3 Tresor p's ...	iijs
Item un veit livre en latyn appelle3 pontifical de	
Istories de div ^{es} papes p's... ..	ij.š
Item un gros livre Fraunceys de Merlyñ p's	iijs iiij.đ

Item un large livre des passioñs de div ^s seintz p ^s ...	iijs
Item un petit livre de Beux de Hamptoñ en Fraunceis	
p ^s	xx.đ
Item un livre en Fraunceis del vie de Seint Thomas	
de Cant p ^s	xij.đ
Item un livre de latyn de seint escripture appellez	
abies cov ^e z de blanc quy ^r p ^s	xx.đ
Item un livre en Franceys appellez Taner ^r p ^s ...	xxđ
Item un livre en Fraunceis de Histories del Ev ^a ngelie	
p ^s	iijs
Item un livre appellez Barthas de pp ^e tate rez p ^s ...	xx.đ
Item un livre cov ^e z de blanc quy ^r appellez les	
Cronicles Tryvet p ^s	xx.đ
Itē un large livre appellez racōnale divinoz en latyn	
cov ^e z de blanc quy ^r p ^s	xxvjs. viij.đ
Item un large livre en fraunceis appellez le Romance	
de Launcelot p ^s	xiijs iiijđ
Item un veit livre rumpu ^z de Fraunceis de rymances	
p ^s	xijđ
Item un novel livre de les Ev ^a ngelies glosez en	
Engleis	x.s
Item un large liv ^r e en Ffraunceis t ^s bien esluminez de	
la Rymance de Alex ^o t de les avowes al poun p ^s	xxvjs viijđ
Item j livre des Apocalipses	xx.đ
Item ij larges livres de ley C ^y ville en latyn lun appel-	
lez Digeste veit t laut ^r Code p ^s	vjs viijđ
Item un veit livre fraunceis appellez Tanere p ^s ...	xij.đ
Item un veit livre de Cronicles Dengleterre p ^s ...	xij.đ
Item un livre appelle Flos Historiaz p ^s	xxđ
Item un petit livre Ffraunceis del Reclus de Melans	
p ^s	xijđ
Item un veit petit livre comenc A Dieu rent g ^r ces t	
m ^r ies p ^s	xijđ
Item un petit livre de Decretals p ^s	xx.đ
Item un veit livre de Dict ^e Poeta ^z p ^s	xij.đ
Item un livre plein de ymagerie appelle Speculū	
humane salutacōis p ^s	xijđ
Item un g ^{nt} quayer de Job glosez p ^s	xij.đ
Item un livre de mesne volum des Apoc ^r lipses p ^s ...	xx.đ
Item un petit livre appellez Flour de Histories p ^s ...	xijđ
Item un veit livre fraunceis appellez William March	
p ^s	xxđ
Item un livre de latyn appellez Triptita Historia p ^s	xijđ
Item un livre de la Bataille de Troie en fraunceis p ^s	vjs. viij.đ
Item un veit quayer fysike p ^s	vjđ
Item un livre appelle la lumer as leys en Fraunceis	
p ^s	xx.đ
Item un quayer de Seint Augstyn de Divinitee del	
Trinite p ^s	iijs iiijđ
Item un livre de Istories del bible briefment compilez	
p ^s	xijđ
Item un veile livre de Ffraunceys appellez la gest de	
Fouke filtz Waryñ p ^s	xx.đ

Item un petit blanc livre appellez Pastorał Gregorij	
p ^{is}	xijđ
Item un livre Destatutz de Fraunce p ^{is}	xijđ
Item un veit livre petit de Fraunceis dount le	
comencement faut p ^{is}	iiijđ
Item un quayer peynte3 appelle3 le Mirrou de Divi-	
nitee... ..	xijđ
Item div ⁹ s veit quayers fraunceis saun3 nouns p ^{is} ...	xijđ
Item j petit livre de meditacoñs de Seint Bernard	
ove j clasp dargent p ^{is}	xxđ
Item j petit livre veit des estatutz Dengleſtre p ^{is} ...	xxđ
Item j livre appelle la Coroñ de Tribulacon & les	
vies de div ⁹ s seint3 ove ij claspes darġ enorrez	
p ^{is}	xiijs iiijđ
Item j livre fraunceis de la vie de Alex ⁹ p ^{is}	ijđ
Item j petit livre de orisoñs cov ⁹ e3 de rouge chev ⁹ el	
ove ij clasp blanc dargent p ^{is}	xxđ
Item j livre de mesue volum de la sege de Troie	
cov ⁹ e3 de rouge quyř & ij claspes dargent	
endorrez p ^{is}	vjs viijđ
Item j veit livre appelle3 Egidius de regie principū	
p ^{is}	xijđ
Item j veit livre appelle3 plogus s̄ci Ysodori p ^{is}	viijđ
Item j large livre eslumine3 de la vie de Alex ⁹ cov ⁹ e3	
de quyř ove ij claspes darġ enamille3 p ^{is} ...	iijs iiijđ
It̄ un large livre rouge del Tretiz de Roy Arthur ove	
iiij claspes de latoñ p ^{is}	iijs iiijđ
It̄ un livre fraunceis dune Tretee de Mercy g ^{ant} m ^{cy}	
p ^{is}	xxđ
It̄ j livre blanc Fraunceys del ymage de mound	
cov ⁹ e3 de blanc quyř ove claspes de latoñ p ^{is} ...	xijđ
Item j livre appelle3 Elucidař & anfs tretiz cov ⁹ e3 de	
chev ⁹ el ove claspes darġ endorř	vjs viijđ
Item j livre fraunceis davowes fait3 al poun p ^{is} ...	xijđ
It̄ j livre de boys de consolacioñ en fraunceis ove	
claspes dargent endorrez p ^{is}	vjs viijđ.
Item j petit livre de Fysikē ove claspes de cupř	
enorrez	xijđ
Item j veit livre de latyn de Cronicles p ^{is}	xijđ
Item j blanc livre appelle le Meistř de Sentences ove	
claspes de laton p ^{is}	vjs. viijđ
Item j rouge livre appelle3 Maundevýlle p ^{is}	iijs iiijđ
Item j blanc livre de Cronicles Trivet ove claspes de	
latoñ p ^{is}	iijs iiijđ
Item j livre fait de vices & vertues nient eslumine3	
p ^{is}	xijđ
Item j livre plein de Orisoñs cov ⁹ e3 de veit drař dor	
de Luk ove claspes dargent endorrez	iijs
Item j livre appelle3 Neustria sub clipeo ove claspes	
de latoñ pris	xxđ
Item j livre gros appelle3 rationale divino3 ove claspes	
de latoñ p ^{is}	xx s

Item j rouge livre de Barlaham ⁊ Josephath ove j claspe de latoñ p's	vjd
Item j large livre de Godefray de Boilloū ove claspes d'argent enorrez ⁊ enamaillez p's	xiijs iiijd
Item j large livre de vices ⁊ vertues en latyn ove claspes de latoñ p's	ij
Item j large livre de Tretes amoioureux ⁊ moralitez ⁊ de carolt françois bien esluminez cov'es de blu velvet ove bosses ⁊ claspes de cupr' endorrez ⁊ enamaillez p's	vjs viijd
Itē j veile livre de latyn ⁊ de françois bien esluminez de div's p'ers al Seinte Crois ove clasps de latoñ	xijd
Itē div's paumfiletts ⁊ rolles en un coffre de petit value p's	xijd
Robt ⁊ bestur cū pellur. { Itē j goune de noir damasq fur' de Cres-ogrey p's le drap xxxij s	
[iiij d] ⁊ la fur' xx s Sa	lijs iiijd
Item j goune de blu drap de leyne fur' de menyver p's le drap ij s iiij d ⁊ la fur' xxvij s iiij d Sa	xxxjs viijd
Item ij gounes de noir leyne fur' de menyver p's le drap vj s viij d ⁊ les ij fur' iiijti xij s iiij d Sa...	e.s
It j goune de blu leyñ de garters fur' menyver p's le drap xij s iiij d ⁊ le fur' xlvj s viij d	lx s
It j noir goune de leyn dj long fur' de menyver p's le drap ij s iiij d ⁊ la fur' xxxvj s	xxxixs iiijd
It j goune dj long de bandekyn rouge fur' de menyver p's le drap xx s ⁊ la fur' xxij s iiij d	xlijs iiijd
It j long goune de rough velvet rouge fur' de menyver p's le drap xxvj.s viij d ⁊ la fur' xliij s iiij d ...	lxxjs
Item rob. Item j goune de rouge drap dor de cipr pondrez de petitiz oisels ⁊ braunches furrez de menyver p's le drap xl s. et la fur' xlvij s ...	iiijti viijs
Item j goune de drap dor de cipr ove elastelt furrez de menyver p's le drap xl s. ⁊ la fur' xxvij. s ...	lxxij.s.
Item j longe goune de rouge velvet ⁊ un mantel de mesme drap fur' de menyver p's le drap evj s viij d ⁊ les ij fur' viij ti ij s	xiiijti viijs viijd
Item j goune de rouge bandekyn ove vert motle fur' de grey p's le drap xl s et la fur' lx s	e.s
Item j goune de noir bandekyn ove rouge motle velvet fur' de martre p's le drap xl. s. ⁊ la fur' lxxvj s viij d	evjs viijd
Item j goune de bleu frise fur' de martyns p's le drap ij s iiij d ⁊ la fur' xl s	xlijs iiijd
Item j court goune de scarlet fur' de foynes p's le drap vj s viij d ⁊ la fur' xl s	xlvs. viij.d
Item j sengle goune de blu drap dor de cipr pondr de cerfs dor p's	xxvj s viijd

l̃m j sengt goune de draṽ rouge dor de cipr ove mermaydes p ^{is}	xiijs iiijđ
l̃m j noir goune de damask linez de noir tartryn p ^{is}	xxs.
l̃m j goune ʔ j. cloke de noir velvet linez de tartryn p ^{is}	vj. m ^{ar} j
l̃m j courte goune de noir velvet linez de Tartryn p ^{is}	xxs.
l̃m ij gounes j cloke de noir draṽ de leyne linez de tartryn p ^{is}	xl.s.
l̃m j noir cloke de draṽ de leyne sengle p ^{is}	vjs viijđ
l̃m j noir cloke sengle de draṽ damask p ^{is}	lx.s.
l̃m j novel cloke long de sangueyn p ^{is}	xxs.
l̃m j veit cloke ʔ j veit goune tannez velvet sengt p ^{is}	xx.s.
l̃m j long goune de velvet p ^{re} sengle p ^{is}	xx.s.
l̃m j goune de velvet rouge ove vert ovage sengt p ^{is}	xxvj.s. viijđ.
l̃m ij longe gounes de blanc damask sengle p ^{is}	iiij fi
l̃m j longe goune de blu draṽ de leyne linez de blanc tartryn p ^{is}	xiijs iiijđ
l̃m j courte sloṽ de velvet rouge p ^{is}	xxs
l̃m j courte sloṽ de velvet noir ove rouge ovage p ^{is}	vjs viijđ
l̃m j goune de mur lynes de rouge tartryn p ^{is}	xs
l̃m j goune de vert attaby linez de vert tartryn p ^{is}	xxvj.s viijđ
l̃m ij gounes de vert draṽ linez de Tartryn p ^{is}	xxvj.s viijđ
l̃m j goune de rouge attaby poudrez de flours dor de cipr linez de rouge tartryn	xxxiijs iiijđ
l̃m j court goune de velvet vert linez de tartryn p ^{is}	vjs viijđ
l̃m j court sloṽ de blu velvet four de draṽ linge p ^{is}	vjs viijđ
l̃m j sloṽ de velvet dor ove esteill p ^{is}	axxiijs iiijđ
l̃m vj peces de tartryn de div ^s colours p ^{is}	cvijjs.
l̃m ij peces de rouge bandekyn ove vert ovage p ^{is}	xxvj.s. viijđ
l̃m j draṽ de russet bandekyn	xxvj.s viijđ
l̃m j pece de chamelet tannez	xxs.
l̃m j pece de teit de laune cont xiiij verḡ	vjs.
l̃m j remenant de gross reynes cont ij verḡ	ijjs.
l̃m ij remenantz de tartryn russet ʔ ij verḡ ʔ j	vs.
l̃m ij verḡ j q ^a noir damask	xxs
l̃m ij verḡ ij q ^a rouge velvet	xviijjs
l̃m vij verḡ blanc damask	xxvj.s viijđ
l̃m ij verḡ noir velvet	xxs.
l̃m ij verḡ noir velvet velu	xxvj.s viijđ
l̃m ij verḡ j q ^a de rouge velvet motle ove vert ovage	xxxiijs iiijđ
l̃m ij q ^a en j. remenant de rouge draṽ dor de cipr velvet	xxs.
l̃m j. cope de velvet noir ʔ rouge nient fait... ..	xxvj.s. viijđ
l̃m j. chesible de velvet motle ove blanc flours nient fait	xxvj.s viijđ
l̃m j goune de draṽ rouge dor trenchez en peces	xxvj.s viijđ
l̃m vij verḡ de blu bokeram	iiijjs.
l̃m un pece de rouge bokeram	iiijjs.
l̃m xv verḡ de bustian plein	vjs viijđ
l̃t ijij verḡ de tartryn russet	vjs viijđ
l̃t ij verḡ de tartryn vert	xs
l̃t j verḡ ij q ^a de vert attaby	xs

lī viij remenantz div ² s de drañ dor	...	...	...	xls
lī ix sloppes de rouge bokeran	...	...	...	xiijs iiijđ
lī viij chapenx de div ² s colours de rough velvet [et de beure dont iiij furē de greye]	...	...	...	xiijs iiijđ
lī j cas de quyē ove ij peynes de yver p ^s	...	...	...	xijđ
lī j bagge de drañ dor p ^r kev ² chiefs p ^s	...	...	...	xxđ
lī j coffr liez de ferē p ^s ...	...	...	...	vjs viijđ
lī j pece de drañ linge p ^s ...	...	...	...	xixs.
lī j pece [de teit] de xx alū p ^s latū vj đ	...	...	...	xs
lī j pece [de drañ linge] de xiiij alū p ^s latū vj đ	...	...	...	vjs
lī. vj. coffr liez de ferē p ^s ...	...	...	...	xxs
līm xxj peeces de Tertes ove le merisme appartenant a yeelt p ^s ...	...	...	...	xx ti
līm iiij petijs remenantz de veil aras febt et pusez p ^s	...	...	...	xiijs iiijđ

Prem ^{er} ement ij bassnettes ove visers et ij aventail p ^s	iiij ti.
līm ij ketelhattes lun blanc ove j bordnē dargent endorrez lautē ove j aventail cov ² e3 de russet velvet p ^s ...	...
līm iiij habergeoīs dont deux de petit maille de Lumbardye p ^s ...	lx.s.
līm j brestplate ove j paunsse dasset p ^s ...	xx.s.
līm ij paunssets et j bracer dasset p ^r plates ove j peir bras p ^s ...	xxxiiis. iiijđ.
līm j peir chaussoīs de maille p ^s ...	x.s.
līm j pallet de Lumbardy ove j viser p ^s ...	xx.s.
līm ij basnets p ^r joustes de guerre ove peses de healmes p ^s ...	xl.s.
līm j court aventail et j peir gussets j petit bracer et iiij peir voidours ...	xiijs. iiijđ.
līm iiij healmes p ^r joustes de pees ove ij umbrers p ^s	xxxiijs. iiijđ.
līm j peir briganters cov ² e3 de rouge velvet garnisez darē endorrez ove j peir maunches de plate p ^s	lxvjs. viijđ.
līm j peir briganters cov ² e3 de blu baudekyn garnisez darē ove les manches sanz plate ...	lxvjs. viijđ.
līm j peir briganters cov ² e3 de rouge velvet garnisez de cupē enorre3 ovesq j coler dasset p ^r joustes de guerre p ^s ...	xl.s.
līm j peir plates cov ² e3 de blu velvet p ^r joustes de guerre p ^s ...	xl.s.
līm ij. peir plates cov ² e3 de noir velvet p ^s ...	lxxiijs. iiijđ.
līm j peir de plates p ^r joustes de pees cov ² e3 de rouge velvet p ^s ...	xl.s.
līm j peir de plates enorre3 p ^r joustes de pece ove vantbras et rerebras j gaunt et j maindeferē p ^s ...	c.s.

Itm j peiř plates de blu bandekyn q̃ fust iadys a Roy Edward p ^{is}	x.s.
Itm j peiř briganters doũt le pys Ɣ le dos blanc et de bas cov ^e s de blu velvet [p ^{is}]	xxvjs. viijd.
Itm ij peiř legherneys appelez forherneys p ^{is}	xiijs. iiijd.
Itm iiij peiř legherneys entiers p ^{is}	xx.s.
Itm ij peiř rerebras iiij peiř vantbras Ɣ j peiř sabatoũs p ^{is}	xxiijs. iiijd.
Itm iiij peiř gantz de plates doũt ij garnisez de latoũ enorrez p ^{is} le peiř xld.	xiijs. iiijd.
Itm iiij peiř rerebras iiij vambras iiij mandeferř Ɣ iiij gantz p ^r io ^s de pees... ..	xxx.s.
Itm j maindeferř Ɣ j vantras j rerebras p ^r joustes de pees p ^{is}	ijs. vjd.
Itm viij basnettes sanz aventail ove iiij visers	xxiijs.
Itm iiij brest plates p ^{is}	iijs.
Itm iiij peiř vanbras j peiř rerebras p ^{is}	xijs.
Itm iiij peiř legherneis entiers Ɣ ij peiř sabatoũs p ^{is}	xvjs. viijd.
Itm iiij hařgeoũs veit de ferř Ɣ v aventailt fiebt p ^{is} ...	xiijs. iiijd.
Itm un beal espe de burdeux ove le gayne de velvet rouge Ɣ le pomel Ɣ le hilde Ɣ le seĩntuř garnisez dargent enorrez p ^{is}	lx.s.
Itm j espe descoco herneis de cupre enorrez p ^{is}	vjs. viijd.
Itm j espe de burdeux herneis dargent enorrez ove le gayne de noir velvet p ^{is}	xiijs. iiijd.
Itm j veit espe ove le gayne hneis de cupř enorrez p ^{is}	iijs. iiijd.
Itm j court espe de guerř le pomel hilde Ɣ gayne hneis darř enorrez p ^{is}	vjs. viijd.
Itm j veit espe dont le hilt Ɣ pomel hneis dargent enorrez j longe espe de burdeux ove le hilt Ɣ pomel herneis dargent enorrez p ^{is}	x.s.
Itm iiij courtes espes de guerre sanz herneis darř p ^{is}	xxx.s.
Itm x autř espes plus longues aseuns fortz aseuns t ^h echantz p ^{is}	xx.s.
Itm j espe de guerř ove ij vantplates p ^r les lystes p ^{is}	vjs. viijd.
Itm j novel baslard de bordenx ove mazerhafte Ɣ le gayne leg ^e ment hneis dargent enorrez p ^{is}	x.s.
Itm iiij veit baslards Ɣ fanehoũs p ^{is}	v.s.
Itm j beal dagger ovesq̃ la manneř de berill Ɣ la gayne de ryban dor de damasq̃ herneis dargent endorrez Ɣ embroudez de blanc perre en un cas de q ^r ř p ^{is}	xiijs. iiijd.
Itm j antre dagger a guyse dun petit espe ove la pomel Ɣ hilde Ɣ gayne hneis dargent endorrez p ^{is}	vjs. viijd.
Itm vij courtes daggers herneis dargent endorrez p ^{is}	xxx.s.
Itm un cotel cort Dirland ove la manneř dun teste de Roobuk ove le gayne herneis darř endorrez p ^{is}	xx.d.
Itm j dagger p ^r les lystes ove ij vantplates p ^{is}	xx.d.
Itm x larges testes de guerř p ^r lannces doũt j p ^r le sengler p ^{is}	xxvjs. viijd.
Itm j large teste de bordenx herneis darř endorrez p ^{is}	vjs. viijd.
Itm v. petitiz testes p ^r lannces p ^{is}	iijs. iiijd.

Itm	x. testes p ^r launces g ^{ra} ntz 7 petitz p ^s	...	...	xiijs. iiijd.
Itm	iiij novelt cotearmoures de les armes du Duc de Glouc de velvet embroudez dor de cipr 7 dargent de cipr bones 7 riches	...	...	xx li.
Itm	j penoñ 7 j trappuñ embroudez des ditz armes p ^s	...	...	xx.li.
Itm	iiij trappes batuz des armes du duc de Glouc 7 del conestablerie 7 dauts armes ovesq ^e xiiij baners standards penoñs gnytons 7 div ^{ers} penselt p ^s	...	...	xiijs. iiijd.
Itm	iiij peñr linth ove iiij hedeshetes de reynes p ^s	...	...	xxxs.
Itm	iiij peñr linth de reynes ove j hedeshete pusez p ^s	...	...	x.s.
Itm	iiij peñr linth feble 7 pusez p ^s	...	...	vjs.
Itm	j veit fotesheete p ^s	...	...	viiijd.
Itm	j veile 7 j enrtyn de blanc taff p ^s	...	...	xx.s.
Itm	j t ^{avers} [de blu] 7 ronge de tartryñ p ^s	...	...	iijs. iiijd.
Itm	j t ^{avers} de blu 7 blanc p ^s	...	...	iijs. iiijd.
Itm	j veit remenant de baudekyn dor p ^s	...	...	xijd.
Itm	viiij peces de bokeram steynez p ^s	...	...	vjs.
Itm	viiij verg ^e de bordalisandre jaune raye p ^s	...	...	xvjd.
Itm	iiij verg ^e de bordalisandr blu	...	...	viiijd.
Itm	ij cov ² chiefs lun de tartryn ver ² raiez 7 lant ^r de satyñ palez noir 7 ronge fur ^r de menyver ^r p ^s	...	...	vjs. viiijd.
Itm	j cov ² tour de mur ^r fur ^r de greye veit feble 7 pusez p ^s	...	...	v.s.
Itm	j cov ² tour de rouge fur ^r de veit menyver ^r feble 7 pusez p ^s	...	...	iijs. iiijd.
Itm	j cov ² tour de appelblu fur ^r de menyver pylez feble 7 degastez p ^s	...	...	iijs. iiijd.
Itm	j mantel russ ² fryse fur ^r de greye p ^s	...	...	xiijs. iiijd.
Itm	j mantel corked fur ^r de bevr ^r p ^s	...	...	x.s.
Itm	j mantel corked sengt 7 j mantel blanc p ^s	...	...	iijs. iiijd.
Itm	j cov ² tour fait de plumes de ostriche linez de quyr p ^s	...	...	xxd.
Itm	iiij peç teit desteynez de rouge ove cerfs blancs p ^s	...	...	vjs. viiijd.
Itm	xvj carpitz petit p ^s	...	...	xvj.s.
Itm	iiij carpitz de mesne assis. p ^s	...	...	xiijs. iiijd.
Itm	j large carpit p ^s	...	...	x.s.
Itm	j large cov ² tour de quyr peintz p ^s	...	...	xiijs. iiijd.
Itm	ij meind ^r cov ² tours de quyr peinte p ^s	...	...	iijs. iiijd.
Itm	v. larges cov ² tours de quyr peinte ove iiij hassoks 7 v. quyssyns del suyte p ^s	...	...	xxvjs. viiijd.
Itm	v. petit remenantz de aras veit 7 feble p ^s	...	...	xiijs. iiijd.
Itm	v. quyssyns de soy taunez p ^s	...	...	x.s.
Itm	viiij quyssyns de blanc satyn p ^s	...	...	x.s.
Itm	iiij masers larges 7 petitz nient liez p ^s	...	...	xjs. viiijd.
Itm	ij chapealx de velvet 7 de bevr p ^s	...	...	v.s.
Itm	j pelewe de ronge drañ dor estuffez de lavendr p ^s	...	...	xijd.
Itm	j bastard sadelt appaillez p ^r jonstes de guer ^r ove les armes du Duc de Glouc [sic] enorrez p ^s	...	...	xiijs. iiijd.
Itm	iiij tapitz de blanc tapicerie p ^s	...	...	xvjd.
Itm	j chequer de cokyle p ^s	...	...	vjs. viiijd.

Itm j table de ij foyles de cokyle ovesq la meyue p^{is} xiijs. iiijl.
 Itm vj quyssyns de baudekyn noir ove blanc roses p^{is} iijs.

En tesmoign de la receite des bns av^{ant}ditz le seal de l'office de la receite de leschequer n^{re} S^r le Roi a lun ptie de ceste endentu^r est mys Et a laut^r ptie de mes^m l'indenture le dit Eschetour ad mys soⁿ seal les jo^r 3 au dessuisditz.

Endorsed :

21 Ric. II.

Indenture de divers biens et chateaux queux furent a Thomas
 Duc de Glouc troves en le chastel de Plecy en Essex.

Proceedings at Meetings of the Royal Archaeological Institute.

July 7th, 1897.

JUDGE BAYLIS, Q.C., V.P., in the Chair.

Mr. F. G. HILTON PRICE, Dir.S.A., exhibited a water-bailiff's silver mace, 6 inches long, consisting of a tube or barrel surmounted by the royal crown. At the lower end of the tube is a small seal-shaped cap which unscrews. This tube or barrel contains a silver oar $4\frac{1}{16}$ inches in length. When the water-bailiff, or constable, was ordered to board a ship to arrest some offender, he would proceed to unscrew the end, withdraw the little oar, refix the cap, and screw the oar into a hole in the cap, thus forming an instrument $10\frac{1}{2}$ inches in length. When closed it formed a constable's staff for service on shore. The hall-mark on the mace is nearly obliterated, but the shaft of the oar bears a hall-mark with date letter P for the year 1830 and the maker's mark F.H.

Chancellor FERGUSON, F.S.A., exhibited a hippo-sandal in which he had placed a horse's hoof, showing it to be undoubtedly a horse-shoe, and probably used to protect a broken or injured hoof. The sandal was found in a Romano-British village near Kirkby Lonsdale, Westmoreland. Two other hippo-sandals of neo-archaic date were also exhibited, one from Poulton-in-the-Fylde, in Lancashire, the other from the banks of the Solway. Both are formed to enlarge the surface of the tread so as to prevent the horse sinking into the soft mosses once peculiar to the districts.

Chancellor Ferguson also exhibited photographs of an iron chest recently brought to light in the Post Office at Carlisle.

Mr. SOMERS CLARKE, F.S.A., read a paper by MARCUS SIMAIKA BEY on "Some Social Customs of the Copts." This paper is printed at p. 225.

Professor BUNNELL LEWIS, M.A., F.S.A., read a paper on "The Gallo-Roman Museum at Sens." The principal contents of the museum consist of stones found during the excavation of the city walls. These stones had been taken from sepulchral monuments and other structures, and used as building materials to fortify the place against attacks of barbarians. The stones may be divided into two classes—those that are inscribed, and those that are sculptured. Amongst the former the most remarkable inscriptions, seven in number, relate to the family of Magilius Honoratus, which held a high position at Lyons also. Another epigraph is short, but interesting; it records the erection of a colonnade and covered walk (*porticus et ambulatorium*), and a distribution of wine and oil by magistrates, probably *Ædiles*, at their own expense (*propriis impensis*). The

reliefs include a great variety of subjects--mythological, domestic, and funereal. Most important among them is the one that represents a scene from the legend of Iphigenia in Tauris. Orestes appears as a prisoner with his hands tied behind his back, but the priestess desires them to be loosed, because he is a victim devoted to the goddess Diana (Artemis). In this series we find many persons engaged in the trades and occupations of daily life, *e.g.*, a bird-catcher, a fuller, a tailor, a musician holding cymbals, and painters decorating the wall of a house *al fresco*. Architectural fragments are very numerous, cornices, capitals of columns, and friezes, indicating the great prosperity of the city under the Roman empire.

PRESIDENTIAL ADDRESS TO THE DORCHESTER
MEETING OF THE INSTITUTE.¹

By LIEUT.-GENERAL PITT-RIVERS, F.R.S., F.S.A.

When Lord Dillon paid me the compliment of asking me to preside on the present occasion I accepted very readily, although I have given up attending Archæological Meetings on account of ill-health; but for some years past I have been engaged in carrying on excavations in this and the neighbouring county of Wilts, and having now completed the much more arduous task of recording the last part of what has been done, in the fourth volume of my quarto work on *Excavations in Cranborne Chase*, I thought it would be a good opportunity of reading before this Society, on the occasion of its visit to Dorchester, a *résumé* of the results of my investigations. I thought at one time of bringing here numerous large diagrams, plans, and sections, to explain the nature of the diggings that I have made, but on second thoughts it appeared to me impossible in a single address to give a detailed account of the work with the necessary precision, and I decided to complete the letterpress and illustrations of my quarto volume, and divide it into parts, fifteen copies of each of which I have placed upon the table or distributed to some of the members, who will thereby be put in possession of the evidence obtained, whilst I confined my address to giving a general outline of the results, which I hope may have some interest, although I am fully sensible that the value of such investigations depends mainly, if not entirely, on the precision with which the evidence is recorded.

Before, however, embarking upon the chief portion of my address, I desire to make one or two brief remarks upon a subject which, at the present moment, occupies a considerable share of the attention of the archæological world, namely, the palæolithic period of Egypt.

Mr. de Morgan, late Director-General of the Antiquities of Egypt, in the preface of his great work on *Egyptian Origins* (1896), makes the complaint that the students of Egyptian history, engrossed by the enormous resources at

¹ Delivered, August 3rd, 1897.

their disposal of materials for the study of the metallic period, and the deep interest and precision of knowledge afforded by the interpretation of the papyri, and influenced also by the facility with which they are transported up and down the Nile in boats, instead of passing along the country landward, have paid less attention to the deposits on the sides of the Nile valley or to the discovery of the sites of palæolithic and neolithic man in that Valley, than has since been done on the continent of Europe. This may have been partly true at the time when Mr. de Morgan's preface was written (1896), but since then the discoveries of Mr. Flinders Petrie and Mr. Seton-Karr have given abundant evidence of the existence of implements of palæolithic type in the valley and the desert bordering it on the east side. Much earlier than this, however, in 1881, I claim to have been the first to discover flint flakes and cores *in situ* in the stratified gravels of the Nile valley at Koorneh on the outskirts of Thebes, gravel in which, after having become indurated through the cementing together of the particles by calcareous infiltration, the Egyptians had cut their flat-topped tombs with square supporting pillars, that have continued perfect in the gravel-rock until the present day, thereby producing evidence of exactly the same character, in so far as sedimentary deposits are concerned, that had satisfied the fathers of prehistoric archaeology in the valley of the Somme. Having experienced the drawbacks to careful study alluded to by Mr. de Morgan in travelling up the river as a Cook's tourist, I decided, on arriving at Luxor, to abandon the steamer and remain there whilst the boat went up to the Cataracts and back, thereby giving me a clear fortnight for the deposits of gravel in the valley. I selected Gebel Assart, a plateau in the bottom of the valley to the north-east of Koorneh, consisting of a delta of hardened sand and gravel, which had been washed down by the Babel Molook, in which the Tombs of the Kings are situated, and spread over the valley below, and which after depositing a delta in the valley between the sides of it and the river, had afterwards cut a channel through it by running water. In the sides of this channel or waddi, the Egyptians had cut their tombs, tunnelling under the nearly perpendicular banks in

the gravel, at that time converted into hard rock. After a careful examination of the sides of this waddi, extending over several days, I succeeded in finding unquestionable chert flakes and cores and one rough tool embedded in the matrix, which, of course, must have been deposited long previously to the hardening of the gravel, the erosion of the waddi, and the cutting of the tombs, some of the flakes being actually chiselled out of the sides of the tombs.

This discovery was afterwards referred to at some length in a paper read before the Victoria Institute by Sir J. W. Dawson in 1884. Dr. Dawson, however, made the unaccountable mistake of saying that the flints found by me in this gravel were natural forms, and that the bulbs of percussion on them were caused by the knocking together of the fragments of stone by natural causes, during the process of deposition. But he is mistaken in supposing that bulbs of percussion are formed to any extent in this way, as Professor Rupert Jones, in his remarks upon the paper, explained very forcibly at the time. If a single bulb of percussion could be so formed, which the examination of the constituents of different kinds of gravel shows is very rarely the case, the production of all the recognised characters of a flint flake could not be obtained by this means. The production of a single bulb on the flat side of the flint, two or more facets at the back with the hollows left by the bulbs of flakes previously struck off on them, and the small flat surface at the top, being the residuum of the flat surface of the core on which the blow was given to flake it off, all formed by blows delivered nearly at the same spot and in the same direction, could not possibly be produced otherwise than by the hand of man. This is an axiom so thoroughly established as to be familiar to the merest tyro in prehistoric investigations. I had considerable experience at the time in the fracture of flint, and had been in constant communication, and had worked with Sir John Evans, Canon Greenwell, Sir John Lubbock, and the late Professor Rolleston, and it would have been quite impossible for me to have made a mistake upon the question of the natural or artificial form of a flint flake or core. In fact, I think that it would have been thought ridiculous by any of the well-known archæologists that I have named to suppose that I could have

made such a blunder, in such a rudimentary matter.¹ I had discovered a palæolithic site in the valley of the Thames in 1869, being the first discovery of palæolithic implements in the gravel of the Thames above London, associated with the usual fauna of the period, which was identified by Professor Busk. This was published by me in the *Reports of the British Association* in 1869, and in the *Quarterly Journal of the Geological Society* in 1872, with a contoured plan and numerous sections, and with remarks by Professor Prestwich, who complimented me on the "exactness and completeness of the description," together with remarks by Mr. Godwin Austen, Dr. Evans, Mr. Flower, and Professor Ramsay, the latter of whom spoke expressly of the "undoubtedly artificial character of the implements." The discovery was subsequently recorded by Mr. Whitaker in the *Memoirs of the Geological Survey* for 1889, p. 341, who spoke of it as a "wholesale discovery." If Sir William Dawson had read these reports and descriptions, showing that my then discovery had been thoroughly ventilated and accepted by geologists, I think he would certainly himself have thought it incredible that eight years afterwards I should be found incapable of distinguishing a flint flake from a natural form. Furthermore, the actual discovery of the Egyptian flints now under consideration was very well authenticated and confirmed by others. Knowing that it was of a nature that was likely to be disputed, and impressed with the importance of having a competent witness to the find, I communicated the results of my searches to Mr. Campbell of Islay, who was stopping at Luxor at the time, and who was himself a geologist, and he went with me on a subsequent day to the spot and saw me chisel out a flake from the side of a tomb, he himself chiselling out another close to it. The finding of this particular flint is described by me in great detail, with drawings and sections, in my paper in the *Journal of the Anthropological Institute*, Vol. XI, 1882, p. 390, Mr. Campbell, who was present, authenticating the discovery in his remarks made at the time the paper was read (p. 397). Since then, other geologists have found similar worked flints in the same gravel and at the same spot. Sir J. W. Dawson was, of

¹ *Ancient Stone Implements of Great Britain*, 2nd Edition, 1897, p. 652.

course, a distinguished geologist, but his knowledge of prehistoric archaeology was much more limited. There is nothing in his paper to show that he had ever seen the flints of which he spoke, and as they have always been in my possession, I am aware that he could not have done so. Had he seen them I am certain that no one with the most rudimentary knowledge of the fracture of flint could have mistaken them for natural forms.

It is true that my finds in these gravels did not include palæolithic implements of the tongue-shaped and oval types that have since been found in the desert and in the high plateau above the valley, from which deposits, the flakes and cores were I believe originally washed down into the delta below; but as the deposits in the bottom of the valley were as hard as rock, nothing could be seen but the few specimens that were in evidence embedded in the gravel on the sides of the waddi and the sides of the tombs. Quarrying into the matrix itself would have been a very costly and laborious undertaking, and though no doubt the usual more generally recognised palæolithic types would have been brought to light in abundance, the flakes and cores were amply sufficient to prove them to be works of human art. A palæolithic implement of the recognised type affords no better evidence of the presence of man than a flake. The surface of the delta was covered with implements of the usual palæolithic forms and they had frequently been noticed on the surface by others, and after having discovered flakes and cores and one rude implement, in the stratified deposits below, there could be no doubt that the implements themselves would have been found in the same gravel, if the rock had admitted of being dug into. Dr. Dawson himself admitted in his paper that there could be no doubt of the prehistoric period of the gravel; all therefore that was necessary was to show the presence of flints of human handiwork in it, to prove their immense priority to the Egyptian age.

It may be said perhaps that it sounds like ancient history to speak of discoveries made in 1881, when so much has been done since by subsequent explorers; and implements of palæolithic type have been found both on the plateau land immediately above the Nile Valley by

Mr. Flinders Petrie, and in the desert by Mr. Seton-Karr at some distance to the eastward of the Nile.¹ This is quite true, but on the other hand the evidence of age afforded by the position of the flints found by me in the deposits at the bottom of the valley, so far as it goes, is much better. The implements of palæolithic type found by Mr. Petrie and Mr. Karr, as I understand from their descriptions, and their verbal communications to me, were found on the surface only. Flints found on the surface of the soil cannot be legitimately disconnected from flints of the surface period, except by form, and form alone is not conclusive in determining date. The same forms might have been used in different countries at different periods. I have little doubt from their number and the absence, as a rule, of flints of a more advanced type amongst them, that they will eventually turn out to be of the true palæolithic age, but the evidence is as yet insufficient. Amongst the flints obtained by me from Mr. Seton-Karr, kindly selected by him as typical, from the large number found by him in Somaliland, was a leaf-shaped spear-head, $2\frac{5}{8}$ -in. in length, $1\frac{1}{8}$ -in. in breadth, and $\frac{1}{2}$ -in. greatest thickness. This could not have been used in the hand without a haft, and might have been employed at the end of a rod as a spear-head. Another was a small scraper, and several flakes had secondary chipping on them. These correspond more nearly to the neolithic than the palæolithic forms of Europe, or at any rate to the more advanced palæolithic forms of the French caves. Had these been found in sedimentary deposits, it is possible they might have been found separated from the more typical and larger specimens of earlier palæolithic type; as it is, it perhaps leaves open a little doubt as to the exclusively palæolithic character of these flints. And this makes it necessary for me to vindicate the character of my original finds, which has been aspersed by Sir J. W. Dawson. We have there, at any rate, evidence of the use of flint tools by man at a time long antecedent to the cutting of the Egyptian tombs, whereas in estimating

¹ Petrie's *Naqada and Ballas*, 1896, pp. 49 and 50; and *Journal of the Anthropological Institute*, Vol. XXV. 1896, p. 271. Mr. Karr's implements were found in two localities, viz., on

the right bank of the Issutagan in Somaliland, 85 miles S.W. of Berbera, and in the Waddi-el-Sheik in the desert some 30 miles east of the Nile.

the value of the surface finds above the valley, and in the desert, we are met with the objection that there was nothing to have prevented a flint worker from walking up the cliff with his flints and depositing them on the surface of the hills, at any period in the history of the valley. We must continue to rely on the *gisement*, as others have done before, and I have little doubt that it will be forthcoming hereafter, although the surface of the desert does not appear to favour the formation of sedimentary deposits. Mr. Seton-Karr informs me that the flints discovered by him were found lying bare on the surface of the top of a hill, from which the overlying earth had been denuded, probably by rain in ancient times. If so, the earth or sand so denuded must have been washed down, together with some of the flints, to a lower level, probably towards the bank of a stream or river which I understand passes through the ground on which the flints are distributed. It is possible that such flints may hereafter be found covered by deposits which had accumulated over them, and even that it may be possible to find with them the bones of extinct animals, which would at once show their place in the history of the district.¹ When we reflect that the first dawn of history in Europe is quite recent in comparison with the earliest dates that can be fixed with certainty in the history of Egypt, the importance of great precision in researches of this kind, in that country, is obvious, and this is no doubt the reason why those who uphold the

¹ Mr. Seton-Karr, in a brief but valuable paper, since published in the *Journal of the Anthropological Institute* (August, 1897), says that the implements of true paleolithic type and large size were found in one spot on the right bank of the Issutugan. The smaller implements of neolithic type were found all over Somaliland and also on this spot, but not in any quantity, and all were surface finds. One implement figured by him from the flint quarries of Egypt is of distinctly neolithic, and rather an advanced neolithic, type; and he says that many of the types of implements from these flint mines are new to science. So that as the evidence stands, it would seem as if a transition might be traced in the same sites from the paleolithic to the neolithic types. This, however, although to be expected in a late paleo-

lithic site, is not characteristic of the implements of the river-drift in Europe, in which the implements are all of early paleolithic type, without any admixture of later forms, so that judged by form alone, if form alone were reliable, the evidence of date is as yet inconclusive. An implement of paleolithic type was found in the ditch of Wor Barrow, in deposits which would lead one to attribute it to the Bronze Age, or it might perhaps be neolithic, showing that the finding of such a form must not necessarily be taken as evidence of a Paleolithic Age. Another hand-tool, with part of the outside coating of the flint evidently left to serve as a handle, was found at the bottom of the ditch of Barrow 29. Both of these are figured in my fourth volume.

so-called Chronology of the Bible, are extremely jealous of any evidence which tends to prolong the time between the Egyptian monuments and the first appearance of man in the Nile Valley. The necessity that every discovery should be dated by its sedimentary deposits and by its fauna is clear, and on the other hand, the greater the time, the greater the probability of finding such differentiation in the fauna of the two periods, as can be relied upon for the determination of the periods. Meanwhile, a model of my finds at Gebel Assart with the tombs and the stratification of the gravel, the original flakes and cores and a rough tool found in the deposits, has been placed in my museum at Farnham, Dorset; so that any visitor who has sufficient knowledge of the subject can estimate for himself the value of this part of the evidence relating to the antiquity of man. Mr. Seton-Karr has examined this model, and I have reason to think that when he returns to Egypt, which he intends to do in a few months, he will endeavour to obtain further evidence of the character that I have indicated, the importance of which he appeared himself to be well aware of. Since writing this I have seen the following remark on this subject by M. Salomon Reinach in *L'Anthropologie*, Tome VIII., No. 3, p. 327:—"Tant qu'un gisement n'est pas caractérisé et daté par la faune, il ne présente, pour la paléontologie humaine, qu'un intérêt très restreint. Il faut attendre que de nouvelles recherches nous aient appris si les outils paléolithiques de l'Égypte sont vraiment comparables à ceux de l'Europe et de l'Amérique."

I have been rather tardy in replying to the remarks of Dr. Dawson, but it was only quite recently that I heard of his paper. I have not been in the habit of reading regularly the *Journal of the Transactions of the Victoria Institute*. I have no doubt that valuable papers have been read before that Institution, but as a rule, I think, it has been generally admitted that some of its publications are not entirely free from theological bias in questions that have a bearing on the antiquity of man.¹

¹ "A tendency to cut down the lapse of time necessary for all the changes that have taken place in the configuration of the surface of the earth and in the character of its occupants, since the time of the Palæolithic gravels, still

survives in the inmost recesses of the hearts of not a few observers."—Presidential Address by Sir John Evans, K.C.B., to the British Association at Toronto, 1897.

Since that time, ill-health has prevented me from going to Egypt, and I have been obliged to confine myself to excavations nearer home, but the matter is in good hands, and I have no doubt will be worked out thoroughly. I shall, therefore, make no further apology for devoting the remainder of my address to excavations in entrenchments in Wilts and Dorset.

The former area of Crauborne Chase affords happy hunting ground for the prehistoric archæologist; for although the whole extent of it did not belong to one owner, agriculture was a good deal impeded by it all over, and many of the antiquities owe their preservation to that cause. This is important, as the determination of the age of prehistoric works of the Stone, Bronze and Iron Ages, depends entirely on the identification of small relics, such as fragments of pottery, household utensils and such like objects; and the larger the number of them found embedded in the earthworks, the greater the facility for observing the transition from one period to another. It is also of great advantage to confine oneself to a limited area, for although Roman pottery and Roman relics were pretty much the same all over England, the earlier British pottery and utensils varied a good deal in different districts, and the forms recognised in one place, do not necessarily suffice to identify those of the same age in a different district. Many of the earthworks were occupied successively by different people, and where this has been the case, the transition of the periods is shown by changes in the forms of the objects discovered; so that a thorough knowledge of each period is necessary to distinguish the different people that lived in the same camp or entrenchment. This, for the reasons here given, can be better done in a small homogeneous area than in a large one. My three previous quarto volumes of excavations in this district were devoted to villages of the Roman Age, and tumuli of the Bronze Age. The fourth volume, now about to be issued, relates chiefly to camps of the Bronze Age and to a single long barrow of the Stone Age.

Whilst others have been occupied with the examination of the towns and military works of the Roman Age; Silchester, by a committee of the Society of Antiquaries,

the Roman Wall of Northumberland by a committee of North Country antiquaries, my attention, with the exception of Bokerly and Wansdyke, has been given chiefly to an agricultural district of the same period and the Bronze Age. Both are of equal interest. From the richer and more populous localities objects of greater intrinsic value and more advanced art might be expected, but from the poorer agricultural regions not less valuable evidence of the social condition of the settled mass of the population of the country may be obtained. Moreover, in such a region, the succession of the periods may be better shown.

Our knowledge of the Bronze Age in this country appears to be more limited than that of the other periods, for although we have an immense amount of information, derived from grave-mounds and relics associated with the dead, very little investigation has been made into the habitations and camps of that age or the Stone Age. Dr. Anderson in his work on *Scotland in Pagan Times*, 1886, speaking of the Bronze Age, says, "not a trace of a dwelling of the Bronze Age has been discovered in Scotland," and again in his preface to the Stone Age he says, "As I have before had occasion to remark of the Age of Bronze, I have now to repeat with respect to the Age of Stone, that there is no vestige of a dwelling or defensive construction, which can be proved by evidence to have been the work of the men of the Stone period." I observe also that Mr. Boyd Dawkins in his opening address to the Antiquarian Section of this Society at Scarborough in 1895, after giving an account of the work of the past year in other branches, says, "Our knowledge of the Bronze Age in Europe has not been greatly enlarged by recent discovery." Again, with respect to square-shaped camps of the Bronze Age, Mr. G. de Mortillet, in giving an account of the rectangular Bronze Age terramares of Italy, in which he divides them into "habitations terrestres" and "habitations lacustres," says of the distribution of such camps in Europe generally: "Les habitations terrestres ont été fort peu remarquées. On n'en a signalé qu'un petit nombre. C'est une lacune à combler. Il y a beaucoup à faire dans cette voie."

These and other remarks of the same purport that I have come across, are enough to show that the oppor-

tunity of examining a series of square-shaped camps, now proved to be of the Bronze Age, was not to be lost sight of, and having several near Rushmore, on my own and my neighbour's property, I decided to excavate them thoroughly and ascertain their age.

The square or rectangular camps here described and detailed in my fourth volume, are four in number. (1) The South Lodge Camp in Rushmore Park; (2) a small square entrenchment on Handley Hill; (3) the Angle Ditch on Handley Down; and (4) the Camp on Martin Down, $2\frac{3}{4}$ miles to the eastward of Handley Down.

The South Lodge Camp.—This is an entrenchment, about $\frac{3}{4}$ of an acre in area, which, at the time I first saw it, was of very low relief, the ditch having completely silted up, and the rampart become denuded by age, but the ditch was found on excavating it to be 6·6 feet deep beneath the silting. I dug six sections through the ditch and rampart at first, which, proving insufficient, I dug the whole camp—ditch, rampart, and interior space—completely over. The result of this second digging was very satisfactory. At the bottom of the ditch, in positions which showed that they were deposited when the ditch was open and had been just dug, I found a bronze razor, so-called, a bronze awl, and an urn of the Bronze Age. A little higher up, about 3 feet from the surface, I found another bronze razor, a bronze bracelet, and a bundle of bronze wire, all recognised as being relics of the Bronze Age and figured in my fourth volume. All above that was Roman. The ditch was $6\frac{1}{2}$ feet deep all round, and the lower half of it appears to have filled up before the Romans or Romanised Britons occupied it. A bronze looped spear-head was found quite near the top of the silting, adjoining the Roman deposits. The age of these looped spear-heads is uncertain, but there is no doubt that they are of late Bronze Age, which accounts for this specimen being found so high up. Nothing of iron was found below the Roman deposits. In the body of the rampart, nothing but Bronze Age relics and pottery were found. The rampart having, of course, been thrown up at the time of the first construction of the camp, nothing was able to penetrate into it subsequently. This and

other excavations in this district show the importance of digging the whole of a camp over down to the undisturbed soil. The most erroneous conclusions may be come to by confining the explorations to sections only, and many of the most important objects may be missed. The description of the excavation of this camp was first published in the *Wiltshire Archaeological Magazine*, Vol. XXVII., p. 206. A detailed account of it, with contoured plan and sections and drawings of the objects found, is given in my fourth volume of *Excavations in Cranborne Chase*.

Handley Hill Entrenchment.—The square entrenchment on Handley Hill included only $\frac{1}{4}$ of an acre of land. It was more regular in form than the South Lodge Camp, and in lower relief, the crest of the rampart being only about 0·8 foot above the level of the ground, and the ditch shallow in proportion. The contents of the entrenchment, after digging it all over, were found to consist of Bronze Age pottery only, with a little of Roman Age at the top, a well-formed flint celt in the centre of the interior, and a leaf-shaped arrow-head close to the outside. A silver denarius of Trajan was found on the old surface line beneath the rampart. This, if the rampart had been higher, would have conclusively determined it to be of the Roman Age, but the very slight depth of the soil above the coin, made it doubtful whether it might not have worked down from the top at a period later than its construction. I consider this camp, therefore, to be Bronze Age or Early Roman. The sides and angles were more regular than in the other camps, and I should not be surprised if this were found hereafter to be the chief distinction between the square-shaped Roman and the square-shaped Bronze Age camps.

Angle Ditch, Handley Down.—The ditch of the “Angle Ditch” was of nearly the same dimensions as that of the South Lodge Camp, but there was no rampart. It was on the grass-covered down, and was only discovered by hammering with the flat side of the pick on the grass. The sound of a blow on a grass-grown surface is hollow over an excavated and filled-up excavation, and this sometimes affords the only means of tracing such works on the

downs. The ditch made a right-angle turn near the centre of its length, and appears probably to have guarded one corner of a rectangular enclosure, the position of which could be seen on the ground. It was filled like the other ditches with chalk rubble near the bottom, mixed silting half-way down, and mould at the top. At the bottom, in the chalk rubble, where they must have dropped in when the ditch was open, were found, portion of a bronze palstave, part of a bronze razor of the form common in these parts, a British urn, and a sandstone rubber. Higher up, at 1·5 feet from the surface, portion of a very well polished stone hammer, with a cleanly-bored hole in it; all recognised relics of the Bronze Age. The pottery of the Bronze Age was all at the bottom of the ditch, and the Roman and Romano-British pottery in the surface mould only, extending to 1·2 feet from the surface. A great part of the oblong area, of which this ditch appears to have marked one corner, was strewn with pottery of both the Romano-British and the Bronze Ages.

Martin Down Camp.—This was a rectangular enclosure, containing about 2 acres. It was situated in a slight depression commanded within bow-shot by the ground outside. The ditch and rampart were of the same form as in two of the other camps before-mentioned, the ditch being 12 feet wide at the top and 9·8 feet greatest depth. The rampart on the inside was of very slight elevation; there was a gap on the north-west side 172 feet in length, with neither ditch or rampart, which, together with the large size of two other openings on the east and south sides, makes me think it was chiefly used for pounding cattle, though no doubt intended also for defence. The silting of the ditch was the same as in the other camps, consisting of pure chalk rubble, 5 feet, at the bottom, above which was mixed silting 3·3 feet, and mould for 1·5 feet at the top. Two bronze implements were found, both in the chalk rubble at the bottom of the ditch, viz., a bronze awl and the stem of a bronze razor. The pottery consisted of Bronze Age fragments at the bottom and Romano-British pottery only in the mould at the top. The mould, in this case, had begun to collect over the silting previously to the Roman Age. It appears probable that a spring in the shallow bottom of the Combe

formerly existed close to the camp, which supplied the inhabitants and perhaps their cattle with water. Romano-British and Bronze Age pottery was found in the interior, the whole of which, with the ditch and rampart, was trenched over like those of the other camps. British pottery only was found in the rampart, except a few fragments of Romano-British quite at the top. The small number of Bronze Age relics found in this camp gives force to the suggestion that it may have been a cattle station, and not thickly occupied by men, although the pottery proves that it was inhabited. The small number of implements may also have arisen from the necessity of saving every fragment of bronze in the shape of a broken or damaged tool for re-casting, evidence of which necessity is shown by a large hoard of damaged bronze implements found near Donhead, Wilts. Some of these are but very slightly injured, which shows that they did not delay melting them down, as soon as they became the least unserviceable. These were mostly large celts, containing a good deal of metal, whereas it may be noticed that the implements found in the ditches of the camps consisted chiefly of small tools, such as awls, bronze wire and razors, the blades of which were very thin, and which would make only a very slight contribution to the melting pot.

The people of the Bronze Age boiled their food with red-hot flints, like those of the Roman Age, the number of burnt flints being about equal to those of the Roman stations, and in the ditches of the camps, the Bronze Age deposits produced an equal number of these flints to those of the Roman deposits above them.

Wherever burnt flints are found in abundance on the surface, they nearly always indicate the presence of pits or habitations beneath the soil. One point, however, deserves attention. Sir John Evans, in his latest edition of the *Stone Age*, makes the remark that flint implements are not as a rule found to any extent amongst the relics of the Bronze Age. It is quite possible that in the tumuli of this district, I may have included some as Bronze Age, that were in reality of the Stone Age. All the tumuli of the Bronze Age do not contain bronze implements, and it is sometimes difficult to decide to what age a round barrow may belong; but I think there

can be little doubt that flint implements were used to a considerable extent by bronze-using people. One observation has, however, been made in these diggings, which appears to corroborate, to some extent, Sir John Evan's statement, viz., that in the Roman deposits in the ditches of the camps, that is, in the surface mould, the number of flint flakes greatly exceeded those found in the Bronze Age deposits beneath, although the number of small fragments of pottery enormously predominated in the Roman deposits.

In the South Lodge Camp, being the first Bronze Age camp excavated, the flakes in the several deposits were not counted, but this was done in the two camps dealt with afterwards. It is difficult to account for. We know that the Romans used flint flakes in the *tribulum* for threshing out corn, and they may perhaps have used them for some other agricultural purposes. The circumstance has been noticed by others as well as myself, and appears worthy of being recorded.

The flakes, though all having bulbs of percussion and facets, were generally of a rough kind, not such as would have been struck off for knives and implements by the skilful flint workers of the Stone Age. Had they been wasters, the *débris* of a flint workshop, the cores would have been found with them, but these, and flint implements were absent in the Roman strata. The flakes must have been imported as such, for a specific purpose. The same inference must be drawn from my finding 445 flint flakes together in a very restricted area on the old surface line beneath the rampart of Winkellbury Camp (*Excavations*, Vol. II., p. 239). I picked out a number of flint flakes together from the exterior slope of the main rampart of Maiden Castle near the old surface line. There is no reason to suppose that any part of Maiden Castle is of the Stone Age. It has occurred to me from the finding of so many flint flakes in the ditches of these entrenchments, whether they might have been used for defence, as we use the broken fragments of glass bottles. It is a mere suggestion. The discovery shows that rude flint flakes, when found in the fields on the surface, must not be regarded as certain evidence of the Stone Age. Nothing but long experience and careful observation will suffice to throw light on this point, in the future.

I have found very little trace of an Iron Age in this district. I excavated some time ago the camp at Mount Caburn, near Lewes,¹ which produced relics of the late Celtic period, similar to those since found by Mr. Bulleid at Glastonbury, but little of that period has been found here. It must have existed at the time of the first construction of the Romano-British villages recorded in the first three volumes of my work. The iron door-keys found in all these villages and figured in those volumes, belong to that period. I have found no trace anywhere of pottery with late Celtic ornamentation on it. The ribbed pottery discovered by Mr. Arthur Evans at Aylesford, is found in the Romano-British villages, but rarely. A late Celtic fibula was discovered in the Romano-British village of Rotherley, *Excavations*, Vol. II., Plate XCVII., Fig. 5, but all the other fibulæ were of Roman form. Enamelled brooches were found in Woodcuts and Rotherley, but none in the Bronze Age entrenchments. The custom of depositing their refuse in circular pits, 4 to 10 feet deep, was common in the Romano-British villages, and I found them also in the late Celtic camp of Mount Caburn, but not a single pit was found in the Bronze Age entrenchments. The practice of burying the dead in these filled-up refuse pits and ditches in Roman times has brought to light a large number of skeletons of Romanized-Britons in Woodcuts and Rotherley, which shows that they were undoubtedly a long-headed race and very short, ranging from 4 feet 9 inches to 5 feet 7½ inches in height for the males. The skeletons of the Bronze Age were found only in graves and were round-headed and taller, but only three were found that could be measured. This is not enough to determine by itself the stature of the Bronze Age people of this district, but as far as it goes, it confirms the researches of Dr. Thurnam in the neighbouring district of Salisbury. Sir Richard Hoare, who excavated such a number of tumuli in this district, unfortunately took no notice of human skeletons, by which omission not only was the important evidence of race afforded by them lost, but it was destroyed for ever. This shows how careful we should be to record

¹ *Archæologia*, Vol. XLVI. p. 423.

everything. I have twice been offered by neighbours permission to dig upon their property, on condition that I would not disturb the human bones or rebury them immediately. Of course I refused to avail myself of permission so hampered with unscientific conditions. This excessive reverence for bones of hoary and unknown antiquity is a great hindrance to anthropological science. The interesting questions of race can only be studied by careful measurements of the bones and skulls, and the preservation of them, if possible, in museums for future reference.

Every entire animal bone found in all the excavations has been measured and the depth recorded, with the result of showing that the small ox, about the size of our Kerry cow, standing 3 feet 5 inches at the shoulder, largely prevailed in both ages. Out of the enormous number of bones discovered, only two were found in the ditch of Wor Barrow, giving a size equal to our Pembroke bull, 4 feet 10 inches at the shoulder, and one in Martin Down Camp estimated at 4 feet. This shows that a large ox of some kind did exist in the Bronze Age, but was not common. It is seldom that, in excavations, horn-cores or other bones showing the peculiarities of the breed are discovered. But the size can always be ascertained with accuracy, and this I have done by means of test animals of modern breeds killed for the purpose of comparison, the measurement of the bones of which are given in my first and second volumes. The sheep in both ages was a small slender animal equal to a St. Kilda ewe, standing 1 foot 8 inches to 2 feet 1 inch at the shoulder. The horse in both ages was a small animal of the size of our New Forest pony, standing 12 hands 3 inches at the shoulder. From the number of bones, it appears to have been eaten in Roman times; but judging by the small number of the bones found, it was not eaten in the Bronze Age. The pig was a small slender animal in the Bronze Age, which surprises me, as I have always supposed that the early pig was a long-legged animal. The pig in the Romano-British villages of Woodcuts, Rotherley and Woodyates, was about the size of our modern pig, viz., from 2 feet to 2 feet 4 inches at the shoulder. The dog in Roman times varied from the size of a retriever to that

of a small terrier, but there is a difficulty in distinguishing dog from fox in some cases.

This part of my excavations in the entrenchments of the district, proves that the people of the Bronze Age certainly did live as they did in Italy, in enclosures of squarish shape and slight relief. They were probably strengthened by stockades on the banks, without which they could hardly have served for defence, but probably their chief use was to keep off wolves and wild animals. They must have been a pastoral people having flocks and herds, and there are not wanting indications that they may also have cultivated the soil in fields from the prevalence of lines of terrace near them, but on this subject I had rather withhold my judgment, as no sound argument can be based on proximity in this matter. The water supply in these camps appears to me to be defective, but there is clear evidence that in a chalk district the water formerly ran out much higher in the combes than now, and spots now remote from water may have had springs close to them. I have proved this in one instance by clearing out a Roman well 188 feet deep at the Romano-British village of Woodcuts, and finding the ironwork of a bucket at the bottom, but no water; and the water in modern wells on the same hill is lower. The position of the Bronze Age camp on Martin Down, in a slight hollow, shows that it must have been selected chiefly for shelter and the vicinity probably of water at that time, and not exclusively for defence. The positions of the South Lodge Camp and Handley Hill Entrenchment, close to the summits of hills, but on one side of them, were probably chosen for the same reason. Had defence been their only object, a command of view on all sides would have been very important. The villages of the Romanized-Britons in this district, though surrounded by banks and ditches of nearly the same size as those of the Bronze Age (not quite so deep), were of curved outline, forming irregular rounded enclosures. We must not assume that because the Bronze Age camps here described were of small size and squarish form, all Bronze Age camps were the same. These may have been chiefly for agricultural purposes, whilst the defensive camps and fortresses were different. The exploration of a large camp, when it comes to be

done, will be a work of great time and expense, if it is done thoroughly, and if it is not done thoroughly, it is better not attempted.¹

The next division of the subject in the papers upon the table (exhibited at the meeting of the Institute) relates to the excavation of a single long barrow, called Wor Barrow, on Handley Down. It was the largest barrow in this part of the country, and was surrounded by traces of a broad ditch. I removed the whole body of the barrow, and on the old surface line beneath it, was found a trench cut in the solid chalk, enclosing an oblong area 93 feet in length by 34 feet in width. The trench was filled with large flints, and photographs were taken, of the soil above, showing marks of stakes sticking into the trench. The flints were for wedging down the stakes. I think that this was a wooden version of the long chambers of stone found in barrows of the same kind in places where stone was more plentiful. In the primary interments within this enclosure on the old surface line and to the south of the centre, six skeletons were found huddled together beneath a small mound of brown mould, three in sequence, crouched on the right side, and three put in with them as bones, with the long-bones laid out by the side of the skulls. I have never found any clear trace of cannibalism in this district, but the custom of burying human skulls and bones with the dead, and bones buried separately but not in sequence, appears to have been frequent. It is not easy to account for this. A recent discovery made by Mr. Petrie in Egypt, and figured in the *Illustrated London News* of the 17th July, 1897, showed that a skeleton of the 5th Dynasty, about 3500 B.C., was found, the bones of which had been cut up and put in a box, with an effigy of the deceased by the side of it. Something of this sort may have occurred here. No relics were found with the primary interments except a small piece of rude pottery accidentally put in. The absence of relics is frequently the case in long barrows; so that the whole of the evidence of this being a barrow of the Stone Age rests upon the form of the skulls and the measurement of the bones. The skulls show that they were a very long-headed race.

¹ The word "camp" is used in this paper, in its accepted archaeological sense, as an enclosed entrenchment; it is not strictly correct.

The skulls are all photographed, but photographs cannot be relied upon for measurement. I have contrived a craniometer, which is exhibited at the meeting, which shows the profile of the skulls with perfect accuracy, the lateral measurements being given on the side elevation at the spots where they were taken; the measurements of the profiles are from the *meatus auditorius*. Four of the primary interments here were people of very small stature, but one was a tall man. The estimation of stature of all the skeletons is taken according to Dr. Rollet's method. Dr. Garson, our best English authority on this subject, has checked, in fact he has recalculated, all my measurements and found them correct. It is impossible to over-estimate the importance of anthropometry in all these enquiries. The ditch of this large barrow, which was 13 feet deep in some places, was thoroughly excavated and the silting examined. The body of this, or any other barrow, gives only relics of the age of the barrow: the ditch gives a record of all subsequent ages, during which it was gradually silted up. It will be seen by the average sections exhibited, that the Roman Age was confined to a thin film of Roman pottery and relics close to the top in surface mould; beneath these were relics of the Bronze Age and neolithic period. The secondary interments in this barrow were probably of the Roman Age, and were found extended near the top of the barrow and in the ditch. A Roman coin of Constantine II. was found near the forehead of one of them. Of these secondary interments, ten had been decapitated, two of which had the heads touching the fingers of the left hand, as if laid down after decapitation by the sides of the bodies. I think the top of the barrow may have been used as a place of execution in Roman times.

Close to this long barrow were two round ones, both of which are mentioned as having been opened by Sir Richard Hoare, but I found relics in both of them. The ditches of the round barrows on this Down were of two kinds. In one, the ditch had been irregularly dug, merely to obtain earth to form the barrow, without regard to its shape. In the rest, the ditch had been symmetrically formed in a true circle. I have no means of knowing

whether these two kinds mark different periods in the history of barrow making. It is worth noticing that no round barrow has been found in my district without a distinct ditch round it, except one in Susan Gibbs' Walk, Rushmore Park, which had the smallest mound found by me in this district. In other parts of England it has been supposed that this was not the case, and that the earth was brought from a distance. To what extent the ditches may have been overlooked in cultivated soil I am unable to say, but I have no doubt that in some soils this may very likely have been the case.

It is noteworthy in connection with this subject that the only four graves found by me with the so-called drinking vessels in them, had no ditches or mounds, except the one above mentioned, which had a very slight mound. The first was that found in the centre of the Romano-British village of Rotherley, described in *Excavations*, Vol. II., p. 5. It was only discovered whilst trenching the surface of the interior of the village. It had no mound over it, or ditch round it: the drinking vessel was at the knees. I believed it to be a Bronze Age interment of previous date to the construction of the village. The second was that in Susan Gibbs' Walk, above mentioned. It was in a clean cut grave, 3 feet deep. The skeleton was crouched, and the drinking vessel at the feet. It had no ditch, and the mound is described by me as being so slight, that it was hardly noticed on the surface, *Excavations*, Vol. II., p. 22. The third was the one on Handley Down, between the Angle Ditch and Wor Barrow. It was in a cleanly cut grave, 3 feet deep, with no ditch or mound, the skeleton crouched, with the drinking vessel at the feet; it was only found accidentally in trenching the surface. The fourth was that described in *Excavations*, Vol. III., p. 240; the drinking vessel, by itself, was found in a cleanly cut grave, 3 feet deep, with no mound or ditch, and no bones, and was only found accidentally whilst digging a hole for sand. Of the three skeletons found in these four graves with drinking vessels, two had very round heads and are typical Bronze Age skulls. The head of the third was longer.

There is no knowing how many of these graves

without mounds or ditches may exist in the soil; as they show no mark on the surface, they can only be found accidentally. They are consequently a class of interment of which we have very little knowledge and I am not aware of their having been found persistently in any other district. The drinking vessels are of the same form, quality and character of ornamentation as those found by Canon Greenwell in the Yorkshire Wolds; he says they are usually found with skeletons and not burnt bodies.

It is noticed that in my district small fragments of pottery of the drinking vessel type and quality, are found with other Bronze Age pottery in the ditches both of the camps and the tumuli. Fragments of pottery with chevron patterns on them are also found in the ditches of both camps and tumuli, which affords evidence of their being probably of the same period. As the camps are proved to be of the Bronze Age, those tumuli which have no bronze implements in them, but which contain chevron patterns on their pottery, are shown by this to be of the same period. The distribution of chevron patterns all over the world is traced in considerable detail in my fourth volume.

One round barrow on Handley Hill consisted of a small mound with a distinct ditch round it and a causeway of undisturbed chalk across it; the graves in the barrow appear to have been rifled and the contents taken out; but fifty-two secondary interments were found buried in urns or marked by fragments of British pottery just beneath the soil on the level ground outside the ditch on the west side. These were probably graves of the family or descendants buried near the grave of their chief. Had it not been for the method I have adopted of contouring the ground and trenching the whole of the area included in my plan, these secondary interments must inevitably have been overlooked.

The use of carefully made models of excavations are of the utmost importance in museums. There are as many as 118 models of different kinds in my museum at Farnham. I have found that by means of them, I can explain the nature of the evidence that is relied upon, in a few minutes, whereas it would take visitors a long time to acquire the same information from written descriptions

with plans and sections, if it could be done at all. Rows of reliefs arranged in cases, without regard to their *gisement*, are of no use for educational purposes, and I can hardly doubt that models will be largely used in future, both in general and local museums, more especially in those localities in which the excavations have been made. My models are of well-seasoned mahogany and are carved from the contoured plans. Carpenters should be trained to the work; my estate carpenters are so used to it, that I have only to put a contoured plan before them on a proper scale, and they will cut it out with the utmost precision; but of course I supervise the construction of the models very closely.

One of the most instructive parts of these excavations, and one which might eventually enable some idea to be formed of the length of time that has elapsed since the construction of these works, is the study of the silting of the ditches. I exhibit three sections of the ditch of Wor Barrow, taken on different sides, showing the denudation and silting that has taken place since the ditches were cleared out and my excavations abandoned in 1893. Since then the ditches have been left untouched and exposed to the atmosphere. In the centre of the ditch the chalk rubble has risen $2\frac{1}{2}$ feet, consisting entirely of pieces of pure chalk, similar to what was found in that place at the time I re-excavated it.¹ Seams of mould are seen in this rubble formed by turf mould fallen from the edge on the top of the ditch, similar to those which, in the old silting, had lost colour and been compressed by moisture and the superincumbent weight of the silting above them. The sides of the chalk rubble had covered the undisturbed chalk sides for a space of 8 feet from the bottom, leaving 6 feet or more still exposed to the action of rain and frost, which in time will further disintegrate it and add to the size of the talus, and then the whole of the sides being sheltered completely from those influences will cease to fall down, and the chalk rubble in the ditch will become stationary at the same height that I had found it; and the mixed silting, consisting of finer chalk mixed with mould and produced by other causes, will supervene; finally the mould will be added to it at

¹ This was explained by sections in the illustrated copy of my address.

the top as before. The top of the ditch meanwhile had enlarged about a foot and a half in width on each side during the four years that it had been exposed to the air. The new talus was produced by precisely the same causes as the old one.

This investigation shows that all the fragments of pottery that had been found by me in the old chalk rubble were of the period of the first construction of the ditch, or within a year or two after it, and it accounts for so little having been found in this part of the silting, which had accumulated very rapidly. The hard sides of the ditch had assumed a convex form owing to the lower parts of them having been covered up and sheltered from the frost and rain much sooner than the upper parts. This convexity had already begun to increase as shown in my new section, and will continue to do so until the whole of the sides are covered up by the new talus, possibly a period of some five or six years, an infinitely short time compared with the whole time necessary to complete the entire filling of the ditch. The fine mixed silting above the chalk rubble was not formed by the disintegration of the sides, but by the accumulation of fine sediment washed down from the barrow or blown in from the surrounding country. Lastly, when the grass had begun to grow upon the barrow, the ditch and the surface of the downs around the barrow, all silting would cease and the mould would begin to grow by the decay of vegetable matter, and this, judging by the evidence of most of the ditches, could not have taken place until a comparatively short time before the Roman occupation. Finally, the pure surface mould, without stones or any other substances, must have grown some six inches in the centre of the ditches after the people of the Roman Age had ceased to deposit their relics and pottery.

By the same reasoning, we may assume that the smaller Bronze Age ditches of the South Lodge Camp, the Angle Ditch and Martin Down Camp, must originally have been a foot or two narrower, and the convexity of their sides must have been due to the same causes. The ditches in the case of these camps may have been kept open, and even their depth increased for defensive purposes. It is also possible that the convex sides may to some extent

have been adopted intentionally to increase the width at the top and the depth at the bottom; but still, as the deposits show that they silted up gradually and were not filled up, the pure chalk rubble found in the bottom of all of them must have been due to the disintegration of the sides, and the objects found in this rubble must all have been deposited soon after their first construction, or after they had been left to the erosive force of the atmosphere. Whether any estimate can ever be formed of the time necessary for these deposits to accumulate appears possible, but doubtful. That the ditches must have silted up in a constantly and greatly diminishing ratio appears certain; and the surface mould, owing to the greater luxuriance of the grass caused by the greater depth of the mould and greater moisture in the centres of the ditches, must be constantly increasing at a greater rate than on the surface of the country generally.

In the examination of the ditches of camps and barrows, attention should be given to the method of conducting the excavation. The most natural way, the easiest, and the one generally adopted is to dig down to the bottom in one spot, and then work out the ditch horizontally all along. This frequently leads to error in assigning the fragments of pottery and relics to their proper *gisement*. Fragments from the top fall down and are picked up on the bottom, to which part they are often erroneously attributed. The proper way is first to take off the turf over the whole area that it is intended to excavate, and then work down from the top in a succession of spits; in this way the pottery and relics from the upper spits are removed and recorded before the lower spits are dug into, and no mistake as to the depth of the objects can possibly occur.

The practice of contouring the ground before excavation is of great importance, both in barrow and camp digging. In a properly conducted excavation the whole of the surface soils and deposits have to be disturbed, and contouring is the only means by which the original shape of the work can be recorded. I think that no ancient earthwork should be excavated without preserving a record of its original shape. Contours are necessary to record the direction of the drainage of a village or camp,

a matter of no slight importance in those pluvial ages, and one entirely affecting the formation of the sedimentary deposits, on which the evidence of age so greatly depends. Contouring is indispensable in the case of camps and other defensive works, to show the command of ground, and whether the work is or is not a defensive one, as in the case of the Martin Down Camp, in which it was shown by contours that it was slightly commanded on all sides from the outside. By means of contours, a section can afterwards be drawn of any part of a camp, and in any direction. It is also necessary in some cases to show the likelihood of a spring having existed within, or close to, an earthwork, which is also exemplified by the Martin Down Camp. Contoured plans are indispensable for the construction of models. The contours were very carefully surveyed with a spirit level on the ground. It is neither a very difficult nor laborious process. I have restored all my camps on the ground to their original forms before leaving them; and my usual copper medalet, shown in my first volume, p. xx, has been put into all my diggings.

I regret that it has been impossible to distribute the detailed account of all these diggings to more than a few of the members.¹ If I had done so, there would not have been time to read them. These portions of my future fourth volume are intended to verify the statements made in my address, and will be of use chiefly to those who are actually engaged in archæological excavations. They are not intended for casual readers. The record of an excavation takes about five times as long as the actual digging. The relic tables given in my fourth volume, and in the previous ones, are very useful as recapitulations of the things discovered, without trespassing upon the text. Being in a tabular form, they enable the enquirer to ascertain in a few moments every object that has been found in all the different parts and deposits. Everything has been recorded in this way, however small and however common. In the same manner, there has been no selection in my fourth volume of objects for illustration; everything has been drawn, down to the most minute fragment of pottery that had a pattern on it. Common things are of

¹ Fifteen copies with elaborate illustrations were distributed at the meeting; all are included in the fourth volume of *Excavations in Cranborne Chase*.

more importance than particular things, because they are more prevalent. I have always remembered a remark of Professor Huxley's in one of his addresses. "The word 'importance,'" he said, "ought to be struck out of scientific dictionaries; that which is important, is that which is persistent." Common things vary in form, as the idea of them passes from place to place, and the date of them and of the places in which they are found, may sometimes be determined by gradual variations of form. There is no knowing what may hereafter be found to be most interesting. Things apt to be overlooked, may afterwards turn out to be of the greatest value in tracing the distribution of forms. This will be admitted when it is recognised that distribution is a necessary prelude to generalisation. I regret to find in endeavouring to trace the distribution of patterns, that archaeological societies illustrate fewer things than formerly. It is thought, perhaps, that when a form has become common, there is no use repeating or even recording it. This is a great mistake in my opinion, and there is no excuse for it, now that illustration has become so much more economical and so effectual. The illustrations need not be elaborate, but sufficient to trace the transition of the forms. If ever a time should come when our illustrated newspapers take to recording interesting and sensible things, a new era will have arrived in the usefulness of these journals. The supply, of course, must equal the demand, but the demand shows what intensely stupid people we are. People bowing to one another appears to form the staple of these productions, as if it were not bad enough for those who are compelled actually to take part in such functions. Field sports are no doubt things to be encouraged, but can it be necessary to have a picture of a man running after a ball upon every page of every illustrated journal in this country? Let us hope for evolution in this as in all other things.

The compilation of a work of so much detail necessitates the employment of clerks. I make it a rule that nothing in the letterpress should be issued that is not in my own writing, and of course I am responsible for the whole. But the calculation of the numerous and tedious indices, the compilation of the relic tables, the photo-

graphs, the identification, measurement and restoration of the skulls, bones and pottery, the surveys, the contouring, careful labelling and correction of proofs, printing of the tickets, the collection, arrangement and description of the indispensable museum, the drawing of the plates and the close supervision of the workmen on the ground, requires the assistance of at least three men of different qualifications. Living in my house they must necessarily be men of good character as well as energy. Those who have left me have generally obtained more lucrative employments. This, of course, entails loss of time, and the training of the fresh ones from the very beginning. - This part of the subject is important for those who may contemplate a similar method of conducting excavations. I shall allude to it in my fourth volume, as I have done in my previous volumes. As a rule I have been well served by my clerks.

There are many subjects connected with these excavations that I have been unable even to touch upon in this address. The amount of work still before the future of anthropologists is enormous, when the camps and habitations of prehistoric men come to be gone into. So far from barrow digging and camp excavation having been worked out, as I understand some persons have asserted, it has hardly yet commenced upon a thorough system. But when we consider the rapidity with which ancient earthworks are being destroyed, the utmost care is necessary, not only in preserving, but in examining them. If I were asked to give a title to this paper, it would be "A plea for greater precision and detail in excavations." It has lately been said in one of our leading journals that my methods are too detailed for public funds. I certainly have never had the slightest wish for the assistance of public funds; quite the contrary, I should find them an impediment. But if this is true, which I do not think it is, it only shows, in my opinion, that public funds ought not to be used for the purpose, but that the work should be left to be done by private individuals like Canon Greenwell, whose pupil I originally was, as a digger, who are devoted to these most interesting investigations, and who have the leisure, the knowledge, and the means to do the work thoroughly. I am informed

that there are people who think they are doing good by digging and grubbing out antiquities, without making any record at all of their investigations. I think that a landowner, if he is not sufficiently interested in these matters to work himself, could do no better service to archaeology, than by prohibiting the investigations of any one, without obtaining some security that they will be well recorded. A discovery dates only from the time of the record of it, and not from the time of its being found in the soil. In conclusion, I have only to acknowledge my short-comings. Notwithstanding the care that I have taken to omit nothing, I am aware that my investigations fall short of what they ought to be, and probably will be, in the future. But I hope that in so far as regards my own and my neighbour's lands, to whom I am indebted for permission to dig, and in all that concerns the Bronze Age and the square-shaped camps of that age, it will be admitted that Mr. de Mortillet's "lacune" has been fairly well filled up in the particular class of antiquities to which this paper relates.

A ROMAN VILLA AT FRILFORD.

[NOTE.—The following paragraphs describe a small Roman villa excavated about twelve years ago by Mr. A. J. Evans and the late Professor Moseley at Frilford in Berkshire, about eight miles south-west of Oxford. They were written by Mr. Evans at the time of the excavations, but neither they nor any other adequate accounts of the villa have appeared in print. It appeared to me, when Mr. Evans lately showed me the MS., that the villa deserved describing in print, and that Mr. Evans' description was an admirable one: I therefore obtained his consent to its publication, with some slight alterations, as follows.—F. HAVERFIELD.]

Frilford is already a classic site in the annals of English archæology. In May, 1865,¹ Mr. Akerman and Dr. Rolleston first called the attention of the Society of Antiquaries to a remarkable ancient cemetery in a field between Frilford and Garford, which, from its old name Frilford Heath or Frilford Field, seems to have been at one time part of the common pasture-land of the village. The name Frilford itself, in its old English form Frigeleford, was connected, with great probability, by Mr. Akerman with that of Woden's consort Frigga,² so that the original signification of the name would be the ford of Frigga's lea or meadow, or an old ford across the river Ock, which lies in the immediate neighbourhood of "Frilford Field."

In a further communication to the Society of Antiquaries in 1870,³ Dr. Rolleston contributed the results of his continued researches into the Frilford remains, and his paper on the subject is, I suppose, the most exhaustive attempt ever made to reconstruct the obscure history of the English Conquest of Britain on the firm basis of archæological evidence.

The high interest of the Frilford cemetery lies in the fact that it was continuously used by the Romano-

¹ *Proc. Soc. Ant.*, Second Series, Vol. III, p. 136.

² Mr. Akerman suggests an original form, Frige-leah-ford.

³ *Archæologia*, Vol. XLII, pp. 417-485.

British and pagan Saxon inhabitants of the spot. The earliest class of graves here found are more or less oriented, with the bodies extended at full length. In some of these have been found leaden coffins of unquestionably Roman fabric, and containing in several cases Roman coins, in one or two instances (according to the well-known practice) placed in the mouth of the skeleton, and dating from Constantine the Great to Valens, Valentinian, and Gratian. Besides these characteristic Roman interments there was an abundance of other graves, in some cases showing traces of wooden coffins and belonging to the poorer Romano-British inhabitants. In some of these also were coins ranging to Valens' time. The Romano-British character of these interments was shown not only as Dr. Rolleston has pointed out—by the character of the skulls they contained—but by the discovery of an unmistakeable Saxon urn “15 inches above a skeleton occupying one of these graves.”¹ The Anglo-Saxon interments were of three kinds: cremation urns such as the above; shallow un-oriented graves containing skeletons and various relics such as fibulæ, spear-heads and umbos; and, finally, deeper graves, oriented like the Romano-British, but having stones set round the edges of the grave and containing Anglo-Saxon insignia together with the skeletons. The latter class of graves probably belong to the period of transition from heathendom to Christianity—the orientation pointing to missionary influences.

Since 1870, when Dr. Rolleston's valuable paper was published in the *Archæologia*, fresh discoveries of graves, partly due to quarrying operations, have continually been made, and Dr. Rolleston himself was able to add considerably to his observations, which happily exist in a manuscript form. Since his death, Professor Moseley, his successor in the chair, but now also lost to us, has from time to time had an opportunity of investigating fresh interments, including those of several skeletons² enclosed in leaden coffins, but the cessation of quarrying operations has latterly stopped the course of discovery.

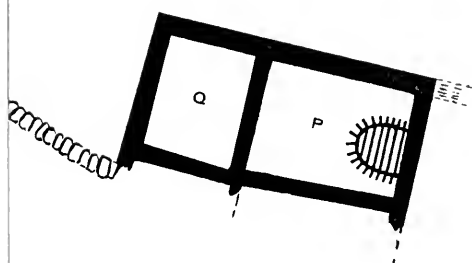
¹ *Archæologia*, Vol. XLII, Plate XXIII, Fig. 1.

² In three instances Prof. Moseley found a coin in the mouth of the

skeleton: (1) Of Valentinian I; (2) probably of Valens much defaced; (3) a barbarous imitation of a coin of Constantine the Great.

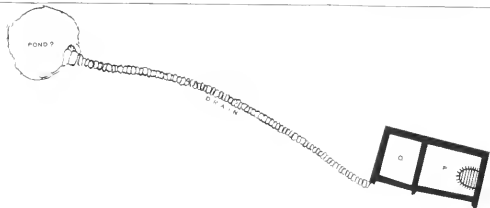
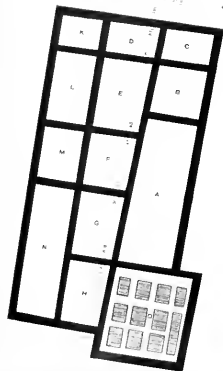
On the present occasion, however, I wish to direct attention not so much to the cemetery itself as to some remains of the Roman period, which evidently stand in close connexion with it. The discovery of this extensive cemetery containing remains both of the Romano-British and heathen Saxon periods afforded itself sufficient proof of the contiguity of a settlement in early times. As a matter of fact, fragments of ancient pottery and other similar traces of former habitation are scattered about the surrounding fields. Especially is this the case in a field just behind the "Noah's Ark Inn," and near the bridge over the River Ock, to which it descends by a gentle slope. This field is literally strewn with fragments of Roman tiles and pottery, and coins of Imperial Roman date have not infrequently been found here; and in this field or the immediate neighbourhood were found two fibulæ. Beyond this there is an old ford across the stream, and the remains extend to a copse, where they are described as specially plentiful. The copse itself is known by the name of Blackington. These remains lie a little to the south-east of the ancient cemetery and to the left side of the road going from Frilford to Wantage.

Nearer Frilford itself, and about two hundred yards distant from the cemetery, Dr. Rolleston had already excavated what proved to have been two Roman rubbish-heaps, the cavities containing which represented no doubt a part of the quarries used to supply the material for some neighbouring villa. In the pits were discovered "for a depth of ten feet or more an aggregation of fragments of pottery of the most varied patterns and degrees of fineness, mixed up with similarly fragmentary bones of the ox, sheep, pig, and dog, and with other articles such as knives and coins, which, like the bones and sherds specified, would be expected in the rubbish-heap of a great house." The site of this great house Dr. Rolleston was unable to discover, but I am at present able to describe the site of a Roman dwelling-house about a mile to the west of this spot in a field which borders on the road from Frilford to Kingston-Bagpuze. The circumstances of the discovery are as follow: Mr. Aldworth, to whom this field also belonged, had for some years noticed the abundance there of surface remains in the



ILDINGS
ERKS).

50



GROUND PLAN OF ROMAN BUILDINGS
EXCAVATED AT FRILFORD (BERKS).

0 5 10 20 30 40 50
SCALE OF FEET



shape of tiles and potsherds, and had been led to regard their occurrence as indicating the immediate neighbourhood of a Roman villa.

At Mr. Aldworth's request, Professor Moseley and myself went over to examine the ground, and the results of a preliminary dig were sufficiently encouraging to induce us to undertake a more extensive excavation. The result has been to lay bare the complete ground plan of a Roman dwelling-house and a portion of an adjacent building, the greater part of which, however, has been destroyed by the plough. The foundations of the first form a small parallelogram $69\frac{1}{2}$ feet by 40 feet, with a somewhat projecting hypocaust chamber in the south-eastern corner. The house contained thirteen rooms, or twelve deducting a part which in all probability was simply a portico. The rooms were all small, the largest, that at the south-western angle, being about 29 feet by 9 feet; the smallest (*k*) no more than $6\frac{1}{2}$ feet by 9 feet. The walls, built of rubble masonry, were 2 feet thick. Most of the rooms had been paved with a kind of concrete in which brick dust formed a conspicuous ingredient, but it was only in the hypocaust chamber that there were traces of a tessellated pavement. It was in this heated chamber also that the greater part of the fragments of wall-painting were discovered.

In observing the ground plan of this building we are at once struck with a curious feature. The three central rooms E, F, and G have no visible access to the light, and the question arises, How was their lighting effected? That they had skylights is not to be supposed, nor is it necessary to assume that they obtained their light by rising above the roof of the rest of the building. The simplest explanation appears to be that the space A was a covered portico, and that the windows of the three rooms E, F, and G opened on to it. It is to be observed that the northern wall of A is carried a little beyond the end of the partition wall between the rooms E and F as if just to allow space for a window in the south-eastern corner of the small room E.

If we may, then, assume that the space A represents rather a portico or fore-hall than an actual chamber, we at once obtain a clue to the position of the entrance of the

house. Unfortunately, there is not enough of the walls remaining to give the position of the doors; but even were we able to fix their situation with certainty, we should be still unable to give such an account of the internal arrangement of the house as would satisfy a classical student. The truth is, that the various salient parts of a Roman house—the *vestibulum* and *atrium*, and *tablinum* and peristyle—so easily traced in the houses of Pompeji, have entirely lost their characteristic features in the country *villæ*, large and small, of our Romano-British predecessors. The Southern form of house, with the rooms opening into a central court only partly covered in by its surrounding peristyle, was little adapted to the inclement climate of Britain. The Romans were a practical people, and we may suppose that to some extent they followed the custom of the country, and adopted Gallic and British domestic arrangements.

In the present instance, however, so much is clear that the functions of the Roman *atrium* were reserved for the hypocaust chamber O. The *atrium* was the show chamber of the Roman house *par excellence*, and at the same time the true and original centre of household life. Here was the domestic hearth and the Lararium near it, and here (in the nobler houses) were the wooden cupboards containing the smoke-stained waxen images of the ancestors of the house. Here was kept the strong-box containing the money and valuables, and here were displayed the choicest art treasures of the owner. Here the women plied their spinning and needlework, and here too, on more solemn occasions, the dead were placed awhile to lie in state with their feet towards the door.

When, therefore, in the present case we find not only the heating apparatus of the house concentrated in this room, but the walls and pavement exceptionally decorated with tesserae and frescoes, we are justified in concluding that it served in a somewhat humble way the purpose of an *atrium* to the Romano-British householder. The pavement itself consisted of small cubes of white stone and terra-cotta, of two different sizes, and having been apparently only of two colours, could hardly have represented anything beyond a plain geometrical design. It had been entirely broken up by the plough. The wall-painting

showed a greater variety of colours : emerald green, ochreous yellow and orange, brick and rosy red, white, slaty black, and reddish brown. The greater part seemed to have been mere linear or banded ornament; but from a small fragment, apparently representing a part of an olive wreath, it would appear that there had also been other designs. From the position of some bits of painted stucco in the walls and hypocaust pillars, it is probable that the walls had at some period been rebuilt. The general agreement of many of the colours here found with the Vitruvius list of the principal colours used in house decoration¹ is remarkable. Here we have the emerald green "*ærgo*" or verdigris made from copper and acid; the ochre and orpiment, the *minium* or rosy oxide of lead, the *rubrica*, a red earth coloured with peroxide of iron, the best quality of which, stamped with a goat, and hence known as *terra sigillata*, came from the Island of Lemnos, and was also used for colouring the bright red-ware of Arretium; the reddish-tinted burnt ochre, the *cerusa* or white lead, and the smoke-black or *atramentum*. Of the principal colours mentioned hardly any is wanting except the azure blue in the manufacture of which Alexandria, and afterwards Puteoli, excelled, and which was well represented amongst the remains of the Cirencester wall-paintings. Vitruvius justly comments on the taste of his contemporaries for gaudy colours in their house decoration, and there can be no doubt that the wall-paintings of many a "high-art" Roman salon would have appeared to a modern eye intolerably glaring.

The hypocaust for heating this chamber with hot air, which circulated below the floor, presents a remarkable though not unexampled peculiarity. The pillars which supported the floor are composed of roughly split slabs of the oolite of the country, and not, as is almost universally the case, of tiles (flat or hollow). Hypocaust pillars consisting of squared blocks and round pillars of stone have been found at Cirencester,² and pillars of similar construction have been occasionally found in France.³

The position of the hypocaust room at the southern

¹ *Vitruvius*, L. VIII, c. 6.

² Buckman and Newmarch, *Remains of Roman Art in Cirencester, the site*

of the Ancient Corinium, 2nd Ed. p. 64.

³ De Caumont, *Abécédaire d'Archéologie*, T. III, p. 69.

end of the house is very characteristic of Romano-British villas, and the adjoining portico which here fills the centre of the eastern house-front is another familiar feature. It represents in fact, in a rudimentary form, the more extensive *crypto-porticos* which in the great villas of Bignor in Sussex, and Mienne near Chateaudun—to take two conspicuous examples—ran round the whole of an extensive court, and which formed an imposing feature of Diocletian's Palace-villa of Spalato.

It is to be observed that both the hypocaust at the southern end and the corridor in much the same juxtaposition on the east side occur in a small *villa* discovered by Mr. E. C. Davey at Cranhill near Wantage, and described by him.¹ In this case, too, the ground plan was of the same rectangular shape, the longest sides (52 feet) being from north to south as the Frilford example; while those from east to west were no more than 36 feet. In the Cranhill villa, however, there were only five rooms besides the corridor.

Facing the eastern front of the house there appears to have been a gravel yard, and beyond this, at a distance of 88 feet from the north-eastern corner of the house, were foundations of a part of another building. Of this building only two chambers, P and Q, could be traced with any certainty, though beyond them lay a considerable fragment of wall, having at its southern end a curious square base. That the chamber P was used as a hot-water reservoir is evident, for more than one reason. The floor and so much of the walls as was still intact was coated with brick-dust cement over an inch in thickness, and strongly reminding one of a kind of cement or concrete still largely used by the Italians for their cisterns. On removing this floor a well-like rounded cavity was discovered on the eastern side of the chamber, about $4\frac{1}{2}$ feet deep and formed of large oolitic fragments, which showed evident traces of the action of fire. The object of this furnace cavity was to heat the water in the chamber above, and access to it must have been obtained from a *præfurnium* (now destroyed) to the east of the hot-water chamber.

Whether the chamber itself was used as a hot-water

¹ See below, p. 352.

cistern or actually as a bath it is not so easy to determine. It seems preferable, however, to believe that the actual bathing chamber is to be sought in an adjoining compartment. It is certain that from a point just outside the south-western angle of the chamber Q opened a drain which carried off the waste water to a kind of pond about 80 feet distant. This drain, the fall of which from the house was very slight, and indeed only perceptible on its thorough excavation, had been composed of pipe-tiles and during part of its course of a stone bottom, and was covered by a series of flat stones which formed a kind of slightly-curved paved path to the pond. In the pond, if we may call it so, were various fragments of tiles and sherds of broken pitchers, and in its neighbourhood was a fragment of a small stone column.

The remains of this hot-water reservoir and waste pipe suggest two interesting parallels. At Saintes, in France, were found in juxtaposition three reservoirs of the same kind, with furnaces of a similar character underneath, and beside them the remains of an irregular waste-pipe.¹ An equally remarkable parallel is presented by the Roman villa excavated at Wheatley, near Oxford, in which was a cistern of the same kind with a waste pipe and two furnace cavities below, communicating with a large hypocaust chamber.

This cistern is described as follows in the *Journal of the Archæological Institute* :—

“A cistern or boiler (measuring $4\frac{1}{2}$ feet by $2\frac{1}{2}$ feet) was found over the south-west angle of the hypocaust. This boiler or cistern had the lower part of its floor and some height of the sides perfect, with an ovolo base moulding at the angle. It was lined inside with fine stucco or plaster $1\frac{1}{2}$ inches thick, and outside this were 2 inches of mortar. It rested on large tiles supported by pillars of smaller tiles. Further heat from the furnace was communicated to this boiler by rows of vertical flue tiles or pipes behind the stucco of its sides. These are quadrangular, and measure 8 inches by $3\frac{1}{2}$ inches; they are smooth and blackened with soot in the inside, but scored on the outside to make them adhere to the mortar. Many of these are entire and remain *in situ*. On the south side a leaden pipe, quite perfect, passes from the bottom of this cistern through the outer wall. This pipe probably conducted the hot water to the bath at the east end of the calidarium.”²

¹ De Caumont, *Abécédaire d'Archéologie*, T. III, p. 167.

² *Archæological Institute Journal*, II, p. 353.

At Cimiez, in the Alpes Maritimes, two cisterns or baths of much the same kind were discovered in 1875,¹ adjoining a large hypocaust chamber and surrounded with upright flues of tiles in precisely the same manner as at Wheatley, and as in that and the Frilford example provided with waste pipes.

I may now turn to the smaller remains brought to light during our diggings at Frilford. There was a considerable amount of the red-ware usually called "Samian," though it might perhaps be more accurately described as pseudo-Arretine. There was, secondly, some New Forest ware answering to the pottery found in the Roman kilns in the New Forest.² Of this, two principal varieties are found. That with a dark ground, upon which wavy or arborescent designs are laid on in white, is remarkable as occasionally showing naturalistic representations of ferns or other plants. A small specimen of this, with what may have been intended for a curling blade of grass, occurs among the Frilford fragments. As in the case of other Romano-British ware, this class of New Forest pottery finds its analogies in Gaul. At Montans, for example, near Gaillac in the Languedoc,³ was found a vase decorated with fern fronds—apparently of an *asplenium*—and sprigs of feather-moss (*hypnum*), which almost suggest some form of nature-printing. The appearance of such decorative motives, whether in Gaul or Britain, is an evident sign of a forest country.

The other common class of New Forest ware is of a thicker kind, more usually serving for platters, with a dull white or yellowish ground and bands or coarse patterns of reddish brown. I did not observe any fragments of this among the remains from the Frilford villa, but it is not infrequent on Roman sites in this neighbourhood, and I have obtained several specimens from a Roman site near Wood-Eaton. The presence of New Forest wares amongst the Frilford and other remains of this neighbourhood is explained by the existence of a direct line of road-communication to the south, to which

¹ *Bulletin Monumental*, 1875, p. 372.

² See *Archæologia*, XXV, p. 91 *seqq.*

³ This specimen, taken from the

Bulletin Monumental, is engraved in De Caumont's *Abécédaire d'Archéologie*, T. III, p. 579.

I shall have occasion to return. Amongst the Roman remains found at Cirencester both classes of this "New Forest" pottery are conspicuous, and though it would be unsafe in the present state of our knowledge to exclude the possibility of this ware having been made elsewhere, its conspicuous absence amongst the specimens of pottery from the Roman kilns discovered on the Minchery farm near Oxford, and the occurrence of both characteristic types amongst the remains of this neighbourhood, inclines me to regard it here as an article of import.

The third class of ware found at Frilford to which a special name can be given is the so-called Castor ware. So far as I am aware, none but fragmentary specimens were actually found on the site of the villa: a better specimen was, however, found in the cemetery by Dr. Rolleston, and its occurrence is not infrequent in the neighbourhood. From a Roman site near Islip I have several specimens, and very characteristic fragments were found in excavating a Roman site at Woodperry, near Stanton St. John.¹ The most typical kind of this ware is of a slaty-blue colour, presenting hunting scenes and scrolls in relief. Its principal manufactory seems to have been in the extensive Roman potteries on the banks of the Nen at or about Castor in Northamptonshire, the ancient Durobrivæ. In this case, however, we have distinct evidence that the most characteristic forms of "Castor" ware were also manufactured in this neighbourhood. In the Roman kiln near Oxford several pieces of this ware were discovered, and in one case a vase in an apparently unfinished condition, not having yet received the bluish-black lustre, which was, it seems, obtained by smothering the fire in the kiln.

Amongst other noteworthy fragments from this Frilford site may be mentioned a piece of dull red ware with a convoluted white slip on it. A class of ware of a reddish-brown colour, with white ornaments, occurs from the Oxford kilns, but the Frilford specimen is of an altogether different fabric.

In addition to these, there was the usual abundance of specimens of the commoner classes of pottery of red,

¹ Described in *Archæological Journal*, Vol. III, p. 124. The specimens are in the Ashmolean Museum.

pale yellow, and slaty-black colour such as are generally found on Roman sites in Britain. One piece, however, is remarkable for its form. This is a vase, the neck of which and one side is unfortunately wanting, with a small spout on its globular side. It is usual to describe vessels of this kind as babies' feeding bottles. They are found both in pottery and glass. It may, however, be suggested that vessels of this kind represent the ancient "guttus" which was used for oil, ointments or any liquid which was rather to be dropped than poured. It was also used for pouring libations in sacrifices,¹ the antiquity of the practice being shown by Egyptian wall-paintings on which kings and priests are seen pouring libations to their divinities from vessels of this character.²

Another sherd of red and rather Arretine-like pottery, with deeply impressed ornaments in the form of a radiated half-circle, is noteworthy from its exact resemblance to a specimen from a Roman site near Islip, which was apparently stamped by the same tool. It is probable that this and other common classes of pottery are to be referred to local kilns, and I have recently obtained from Abingdon a remarkable tool, said to have been found near the "Noah's Ark" at Frilford, which of itself bears interesting witness to the existence of a Roman pottery in the neighbourhood. This is a Roman potter's punch, with a simple but elegant geometrical design. It is of bronze, with a perforation at its smaller end, showing that it was probably intended for suspension on a small ring along with other stamps engraved with different patterns. A potter's punch of somewhat similar form was discovered at Arezzo, and a bone tool of the same kind, which had been used for stamping the ornaments on old German urns, was found on the Rhine. It is to be hoped that further researches will result in the discovery on the Frilford site of pottery actually stamped with this punch.

¹ Cf. *Pliny*, XVI, 73, 2. In the case mentioned the "guttus" was of beechwood. Glass vessels would not be applicable for a sacrificial purpose. On the other hand, earthenware vessels were of universal use for this purpose. *Pliny* remarks (l. XXXV, c. 46): "In sacris

quidem inter has opes non myrrhinis crystallinisve sed fictilibus prolibatur simpuviis."

² See Ernst Bötticher, *Die Libirgefässe*; in *Zeitschrift für Ethnologie*, 1883, p. 159 *seqq.*

Amongst the other relics discovered may be mentioned—

1. Fragments of glass: in one case a part of a glass cinerary urn of the usual shape; in another case possibly a fragment of window-glass; while a third fragment probably belonged to a small glass bowl.
2. Large flat-headed nails and an iron object of uncertain use.
3. The iron cap of a wheel, found in the hypocaust chamber.
4. Clay spindle-whorls.
5. A pair of bronze tweezers.

The coins found in the ruins were—

- 1 Trajan, $\mathcal{A}E.$ 1.
- 2 Constantine the Great, $\mathcal{A}E.$ 3—one struck at Lyons.
- 1 Constans, $\mathcal{A}E.$ 3, struck at Treves.
- 1 Valens, $\mathcal{A}E.$ 3, struck at Arles.

The bulk of the coins (amongst which there was nothing remarkable) belonged, as will be seen, to the fourth century of our era ending with Valens, who assumed the purple in 373 A.D. This shows a close agreement with the date of the bulk of the Roman coins found in the cemetery, and generally on the Frilford site. The majority of these belong to the age of Constantine; and the latest Emperors represented are Valens and Valentinian, Gratian, and Magnus Maximus, who began to reign in 383 A.D.

Amongst the local traces and traditions betokening the existence of an ancient settlement on what was once Frilford Field, Dr. Rolleston has already mentioned a haunted thorn-tree on the site of the old cemetery. I may add to this that through the field which borders that in which the Roman foundations were excavated a path-like line can be traced in the peculiar colour of the grass and crops, which, according to the local belief, runs from an old tree on the Fyfield side of the road to the White Horse Hill above Uffington, and is known as the "Fairies' Path." The direction of a path across the fields from Fyfield is also to be noted. Throughout the northern part of its course it runs in a straight line almost directly towards the Roman villa, though there

is no existing reason for a path taking this direction. There can be no doubt of the Roman character of the road line which runs from Bessilsleigh through Frilford, and passing the neighbourhood of the ancient cemetery, proceeds, with arrow-like directness, to Wantage, a Romano-British site on the Port and Ickleton Ways. Mr. Davey, the Wantage antiquary, had also come to this conclusion.¹ From Wantage onwards, this ancient road-line is continued direct towards Silchester, and in this part of its course is still known as the "Old Street." It is also possible that the road from Frilford, through Kingston Bagpuze towards Faringdon, may represent an ancient avenue to the Romano-British settlement at Frilford. Beyond Kingston it approaches an encampment called Aggister, which, curiously enough, is not indicated on the Ordnance map.² The encampment itself consists of a very small oblong embankment only 120 paces long by 40 broad; its rectangular form, however, and its name (the latter part of which is possibly a corruption of "Chester") might indicate a Roman origin. There are apparent traces of an outer line of circumvallation to the north and east of this rectangle.

It seems probable that the "Old Street" found its destination beyond Frilford in the Oxford direction. It is true that at Bessilsleigh the continuity of the straight road-line from Wantage is abruptly broken. On the other hand, there is a straight road-line leading from near the north-eastern corner of Frilford Heath past Cothill, mounting Boar's Hill by the "Fox Inn," to the south-east of which fragments of rude Roman pottery strew two or three fields, and descending to the Thames Valley at Cold Harbour, where the Oxford City Fever Hospital now stands. From Cold Harbour a straight road runs due north to Folly Bridge, St. Aldate's, Carfax, and Cornmarket, in Oxford. The traces of this line of road are, however, obscure, and if of Roman date can only represent a local cross-country communication from Wantage and Frilford to the land east of the Thames. Thus much may be urged in its favour geographically, that, though

¹ "Discovery of a Roman Villa at Cranhill, near Wantage," *Archæological Journal*, Vol. XXXIII, pp. 382-392.

² My attention to this camp was first called by Mr. Davey.

the road between Cold Harbour and Folly Bridge is liable to floods, it forms on the whole the easiest line of access from the uplands of Boar's Hill to Oxford and the country beyond.

The extensive Romano-British cemetery at Frilford certainly points to there having been a continuous settlement on this site during the third and fourth centuries. The buildings at present discovered derive much of their interest from their small proportions. We have not here, as at Bignor or at Woodchester, the spacious mansion of a large proprietor—a small town in itself. The tenements excavated at Frilford must have belonged to members of the humbler class of Romano-Britons. The size of country houses, according to Vitruvius, was to be nicely proportioned to the size of the holding and the amount of the produce. “For those of humble fortune,” he further tells us, “there is no need of splendid vestibules and halls, for such pay their court in the salons and antechambers of others.” “It is only the nobles, whose duty it is to fill the magistracy and civic offices, who require royal vestibules, lofty atria, and peristyles, plantations and extensive walks to show off their dignity to perfection.” We may allow ourselves to believe that in this little Frilford villa—at least during the happier period of Imperial rule—there lived one of that yeoman class, which as we learn from Claudian's fine epigram on the Old Man of Verona, was not quite extinct even in the days of Stilicho—

“Felix qui patriis ævum transegit in agris;
Ipsa domus puerum quem videt, ipsa senem.”

On the other hand, the neighbouring remains of the second house, to which the bath belonged, show that this was not an isolated dwelling-house, and the parallel position in which they stand to one another may incline us to believe that they both possibly belonged to a “vicus” arranged in orderly lines like that discovered at Javols in Champagne. The cemetery itself affords a proof of the existence of a Romano-British village in the neighbourhood, and the character of most of the interments shows that the bulk of the population belonged to a humble class.

That a larger mansion may have existed in the vicinity

is probable enough. It is also probable that by the middle of the fourth century, with the development of the *latifundia* and the progress of that extra-legal beneficiary system by which the humbler proprietors became at once clients and voluntary tenants of wealthy and powerful patrons, the various holdings had passed under one lord. In the last days of Roman rule in Britain much the same state of society must have prevailed as we find described by Sidonius Apollinaris in almost contemporary Gaul. The military element was no doubt relatively far more influential; but side by side with it were great territorial lords, the "honorati" or members of the Senatorial order. From the fragmentary notices of Ammianus regarding the revolt of the Western usurper, Magnentius, the strength of whose faction lay largely in Britain, it appears probable that he derived his main support from a coalition of the two powerful classes of the West—the "*Honorati*," or Provincial aristocracy on the one side, and the "*Militares*" on the other, against the Constantinian bureaucracy.

But whatever may have been the agrarian condition of Frilford in the days of Magnentius or Magnus Maximus, we have here archæological evidence that shortly after their date, and according to appearances even *before* the end of the fourth century, Saxon colonists were in occupation of the spot, who, if they had not exterminated the Romano-British inhabitants, had at least imposed on them their religious customs in regard to their funerals and their form of culture, as regards the ornaments of their person and the character of their instruments and utensils. It will hardly seem probable, in the face of this evidence, that at Frilford, at all events, the new-comers took over their system of land tenure from the former inhabitants. On the other hand, the fact that the Romano-British cemetery continued to be used by the Saxon settlers may be taken to show a certain continuity in the indigenous element, while the flint arrowheads and scrapers which occur plentifully in the neighbouring field may teach us that the Roman settlement here was itself engrafted on an earlier British community.

ON SOME DORSET BELLS.

By REV. CANON RAVEN, D.D., F.S.A.

This communication is sent in the hope that it may lead in time to the addition of Dorset to the eighteen completed counties of England.

The general character of the inscriptions resembles largely those in the neighbouring counties of Devon, Somerset, and Wiltshire; but a great deal remains to be learned as to the West-country foundries of the middle ages. When civic and parochial documents have given forth their secrets, we may expect to find foundries at such a city as Salisbury, or at towns of less importance, as Wimborne Minster, Blandford, Sherborne, Wareham, or Dorchester itself. The situation of Shaftesbury would render it less probable to be chosen for an occupation in which weight plays so notable a part. We know something about Exeter, and should be glad to know more.

There is a village named Paignton near the mouth of a little creek in Tor Bay where, at the end of the thirteenth century and in the fourteenth, lived three generations of a family named de Ropeford, who exercised the combined callings of founder, organ-builder, and clock-maker. Here in 1285 Bishop Peter Quivil, of Exeter, granted to Roger de Ropeford, *Campanistarius*, and his heirs, for one penny each Easter, a certain tenement, they to perform the work of the aforesaid crafts, receiving all things necessary for the work, with victuals and drink whenever so employed. Roger was succeeded by his son William, and William by his son Robert, and from one of the three may have come a few of the group of earlier Longobardic bells. Paignton was the greatest lordship that belonged to the See of Exeter, and here was a goodly house of the Bishop's. Under these favourable circumstances, with ready access to the sea, the work of the de Ropefords may well have extended into neighbouring counties. In the course of a century this family dis-

appears, and one Thomas Karoun, *alias* Bellhuter, possibly a Scotchman, is at work for Bishop Brantingham in 1372.

Of the Dorset bells belonging to this period may be mentioned, firstly, two which bear the Salutation, in whole or in part:—

✠ **AVE MARIA.** Blandford St. Mary, 2nd.

✠ **MARIA : PLENA : GRACIA : MI :** Wambrook, treble.

To these may be added:—

EE SA JHE DE I MES ER ERE. Winterborne Whitchurch, 3rd.

✠ **SANCTA MARIA.** Durweston, treble.

✠ **AVE GRACIA.** Shillingstone, 3rd.

✠ **MARIA.** Hammoon, 2nd.

✠ **SANCTE PETRE.** Tarrant Crawford, tenor.

✠ **SANCTA MARI.** Winterborne Houghton, 2nd.

SANCT : ANDREW : IS : MI : NAME : Wambrook, 2nd.

So far as I can judge by the pen-and-ink drawings which I made in my youth, the lettering and initial crosses on these bells are of a more simple character.

Another group shows greater elaboration, and on that account may probably take a later date in the fourteenth century. In the case of the Silton 2nd we get some limits of date assigned us, the Bidyck family having been patrons of that Rectory from 1312 to 1412.

The Rector's initials are J. C. according to my MS., but the second letter may be G or T. The inscription in my book reads

✠ **DOMINUS : MI : BIDYCK : J : C :
RECTOR : DUO : FECERUNT.**

“Fieri fecerunt” is the general expression for donors, but in this rather early bell Bidyck and the Rector may be the two referred to.

Alton Pancras 3rd is inscribed **AVE GRACIA PLENA** in Lombardic, but I am not sure of the lettering. A bell at Cranborne with the same inscription is in handsome style, with a saltire cross. The second at Charlton Marshall only takes the first and second words, with a considerably floriated cross. One of the bells at Milton

Abbas, evidently not the work of one of the monks, is marked **SANCTA IOHANNES & R.** The tenor at Fontmell, **AVE MARIA**, and the bell at Tarrant Keynston bear good crowned capitals, the latter with a rather elegant cross and with a fleur-de-lis between the second and third letters of the name **MARIA**, the only word on it. The Charlton Marshall tenor, with a plain cross, has endured the ineptitude of some wiseacre, who has marked it—

**& SIT NO MEN DO ME NE BE NE DE
TUM.**

I should be inclined to class Haselbury Bryan 3rd with the bell at Tarrant Keynston, the lettering being fine, and there being a fleur-de-lis stop between the two only words **SANCTE ANDREA.**

Two of these “Longobards” bear unusual legends, the 3rd bells at Iwerne Minster and Shapwick. After the words **& HANC ECCLESIE DEDIT** on the former, which appears to have emanated from one who would not let his left hand know what his right hand did, there follows a hexameter hard to scan as to interpret:—

**TERCIA SIT BONA SUB IESTI NOMINA
SONA.**

At Shapwick are two hexameters, adapted to metrical destruction, from a well-known hymn to St. Christopher:—

**ILLO NEMPE DIE NULLO LANGORE
GRAVETUR CRISTOFORE SANCTE
CAMPAHAM OVICHMAVE TYETUR.**

Speciem is the third word in the second line of the original, and *Nempe* is an alteration from *namque*, and perhaps in this instance an improvement on it.

The last of this group which I will mention is the 5th at Broadwinsor, with

SANCTE GABRIEL ORA PRO NOBIS.

On this we happily get a founder's mark, No. 5 in Ellacombe's *Devon*, the initials *r. n.* being those of Robert Norton of Exeter. He flourished in the west in the early part of the fifteenth century, and Mr. Ellacombe, in his *Church Bells of Somerset*, records a petition presented in

1431 against him by the parishioners of Plymtree before John Stafford, Bishop of Bath and Lord Chancellor. The result is not recorded. As a rule his bells are good.

We now turn to some of the ordinary black-letter class, in the style of the fifteenth century. A few of these, which bear simply *maría*, as Alton Pancras 3rd, Compton Abbas 2nd, and Winterborne Came 2nd (which last inserts a capital R and drops the fourth letter), are presumably turned out by a not too literate craftsman. The Winterborne Came smaller bell, which prefixes *Sancta*, has a beautiful initial cross, with which I should be inclined to compare those on the Compton Abbas bell just mentioned, and on the Pulham 2nd and Tarrant Hinton treble, which bear a remarkable inscription, theologically speaking:—

✠ sunt mea spes hii tres xp̄s maría J̄oh̄s.

This inscription is on the tenor at Compton Paunceford, Somerset.

Another curious trait of ignorance is

✠ En Ter Sede Pia Pro Nobis Virgo Maria,

which adorns the 4th bells at Stourpaine and Fontmell Magna, while the tenor at Blandford St. Mary's has a new form for *Hæc*:—

✠ At Cam Pana Sanc . . . in Hono Re Marie.

At Burstock is one of the earliest instances of advertisements, metrically condemnable:—

✠ me melior here non est campana sub acre,

with which may be cited an East Anglian puff of later date:—

Thomas Gardiner have (*sic*) at last
Made as good as can be cast.

A less obtrusive and more harmonious, though censurable, hexameter appears at Whitchurch Canoniconum:—

✠ plebs oīs plaudit ut me tam sepius audit.

The composer, it is feared, would hardly have been able to justify his use of adverbs, but this is a trifle to some solecisms. It is not chargeable on the Canons of Whitchurch, for Mr. Ellacombe found it on twenty-two bells in Devon; and it may have originated the incomplete line in which the bell-founder Thomas Purdue alliteratively

celebrated his recasting with additional metal in 1676 the noble "Peter," given by Bishop Peter Courtenay in 1484 :—

PLEBS PATRLE PLAUDIT DUM PETRUM PLE[NUS
AUDIT].

A beautiful line, though like the others culpable in scansion, is on Broadwinsor 4th :—

✠ Est michi collatum Ehc istud nomen amatum.

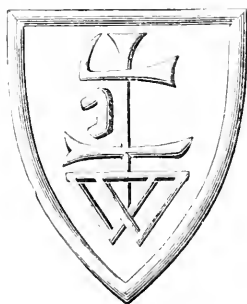
This is also very common in Devon, and is found on sixteen bells in Somerset, but it disappears as we go eastward.

An approximate date may be given to the 3rd and 5th at Fordington, inscribed respectively

✠ Sancta Katerina Ora Pro Nobis, and

✠ En Multis Annis Resonet Campana Johannis,

for they bear the shield (No. 1), in which may be discerned



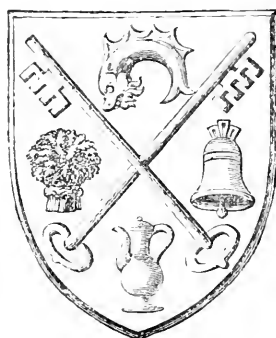
1.—FORDINGTON.

John Walgrave's initials. Like many other foundrymen he himself became a founder. In 1408 he was servant to the great William Dawe, called William Founder, whose marks are all over England. In that year died a wealthy and charitable man, John Plot *alias* Rouwenhale, citizen and maltman of London, and among legacies for Mass of Requiem and repair of "fowle ways" is *iiij.s. iiij.d.* for "John Walgrave, servaunt of Wylliam fondour."¹ I am inclined to connect with this pair a bell which was recast more than 50 years ago, the tenor at Pimperne. When I was bell-hunting there in 1850 Mr. Ewart, then curate

¹ *Fifty Earliest English Wills*, p. 15.

of the parish, told me that the old tenor was dated in Arabic numerals 1415, and inscribed ✠ Sancta Maria Ora Pro Nobis.

The alphabet as far as g occurs on the smaller bell at Hammoon. b is inverted. We find alphabet bells in every variety in many parts of England, and are much puzzled as to their meaning and intent.

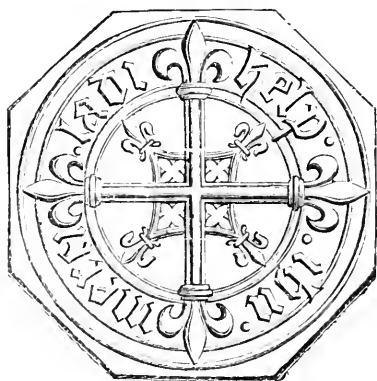


2.—CHARDSTOCK.



3.—CHARDSTOCK.

At Chardstock the two smaller bells were adorned with the beautiful shields (Nos. 2 and 3) and cross (No. 4) of Henry Jurden, a man probably of Loughborough extraction.



4.—CHARDSTOCK.

The symbolism of his first shield indicates an unusual mixture of avocations, the dolphin and keys being emblems of the Fishmonger; the bell and the laver, of the Founder, while the wheat-sheaf is a charge in the arms of

Harleton, the maiden name of Margaret Jordan, who lies with her husband Giles in Loughborough Church. In Henry Jurden's will the description of his house and shop, in the lane called Billiter (Bellezetter) lane in the p'yshe of Seynt Katheryn Crechurche w'in Aldgate of London, has led to its identification with the site at the north-west corner of Billiter Street, fronting on Leadenhall Street, while his foundry was on the west side of Billiter Street, on a space partially occupied by the East and West India Dock-house.

At Steeple we find a bell marked with the rebus of William Culverden (5), a later mediæval citizen and



5.—STEEPLE.

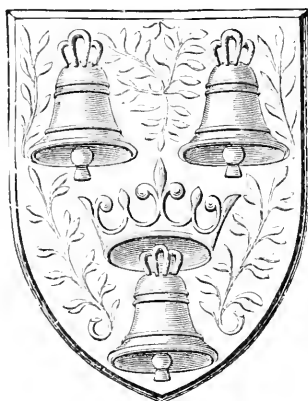
founder, educated, as his will tells us, at Westminster. The Culver, or dove, with *dē* above it, gives his name, and there are the usual insignia of his craft.

Lastly, I mention a very remarkable find, made by my friend Judge Clarence and myself at Ford Abbey in the parish of Thorncombe, on July 5th, 1860. There we found, used as a chapel bell, I believe, a very beautiful specimen from the Norwich foundry, far separated from all its fellows, the only Norwich bell known to any of us west of London. Its note is C, and its diameter 28 inches. The inscription is

✠ *Hec Margareta . Nobis hec Munera Acta.*

On the shoulder thrice repeated is the sprigged shield of

the Brasyers (No. 6) and the initial cross (No. 7). Rhymestop (No. 8) and lettering deserve all that has been said about them by East Anglian campanists. From which of the family this bell proceeded it is impossible to say. The date is about the middle of the fifteenth century, and if any light can be thrown on its history it will be most welcome.



6.—FORD ABBEY.



7.—FORD ABBEY.

The preservation of these inscriptions is a matter of great importance, and I fear but little recognised. Year by year our old bells pass away, and with them, sometimes irrecoverably, important historical and archaeological evidence.



8.—FORD ABBEY.

ON THE EVIDENCE BEARING UPON THE EARLY HISTORY OF MAN WHICH IS DERIVED FROM THE FORM, CONDITION OF SURFACE, AND MODE OF OCCURRENCE OF DRESSED FLINTS.¹

By T. McKENNY HUGHES, M.A., F.R.S., F.S.A.

The enquiry into the early history of man has of late received great impulse. This is partly due to the increasing number of persons interested in the question, and partly to the wide range of modern research which has brought together evidence from many a distant region and has applied many new methods of investigation; but it is also largely due to the recent advocacy of new theories in respect of the age of man by leaders of science whose opinions are always deservedly received with respect even when they offer only a tentative explanation of phenomena in regard to which we cannot feel that we have sufficient evidence before us.

We must always bear in mind that there was strong disinclination to accept the views of those who first stated that they had found traces of man in river gravels, associated with extinct or migrated animals. But we must also remember that this opinion was often supported by inaccurate statements and false reasoning, the exposure of which threw discredit on the whole evidence, and retarded the acceptance of what was true in the theory.

It is, therefore, worth while to review from time to time each part of the evidence upon which any similar statements are based, and carefully sift that which may be considered as proved from that which is only suggestive. With a view to this I venture to offer to the Royal Archæological Institute a few critical notes, first on the forms of flint implements, especially in reference to what is common to the early stages of their manufacture in palæolithic and neolithic times.

I then propose to draw attention to the condition of

¹ Read at the Monthly Meeting of the Institute, May 5th, 1897.

the surface of dressed flints found under different circumstances, with a view to being able by an examination of the character of the fractures and weathering to recognise the vicissitudes through which flints have passed.

I would next examine the mode of occurrence of dressed flints, and, having regard to their condition, would endeavour to read the history of their deposition where now found.

Lastly, in the light of the conclusions arrived at from an examination of those which are undoubtedly of human workmanship, I would criticise the evidence for the supposed occurrence of a more ancient group of implements, for which the name *Palæotaliths* has been proposed.

In examining any region where dressed stones are fairly abundant, collectors naturally seek and select the most perfect and typical forms. In many cases, as for instance where the implements are all imported, no unfinished specimens are likely to occur, though fragments of finished specimens which had got broken may be found. But, where we have reason to believe that the instruments were manufactured on the spot, we may, of course, expect to find all intermediate forms, from the lump of flint, selected for its quality and shape, to the nearly finished specimen which at last had to be rejected as a misfit owing to some accident or flaw.

We have, therefore, in all cases to deal with the forms which flint naturally falls into or readily assumes under the hand of man; and what is here said of flint applies more or less to other stones used for the same purpose.

We must bear in mind that the quality of the stone must affect the forms of implement. A coarse mottled flint, such as commonly occurs in the northern chalk areas of the east of England, being full of varieties of texture due to sponges and other impurities, cannot be depended upon to break with the evenness and regularity that is found in the homogeneous black flints of the southern areas, and which is so essential for the manufacture of the finer instruments. Now, it is a curious fact that the implements of what we may call the neolithic fen type, which are made of the local black flint, are thin and chisel-shaped, and so frequently

ground only on the edge as to show that they were chipped into almost exactly the form they now present before any attempt was made to grind them. On the other hand, what we may call the northern or imported type, which is made of the impure mottled flint of Lincolnshire and Yorkshire, is generally a thick double wedge, and is ground all over in such a manner, and to such an extent, as to show that the implement was reduced to its present form largely by grinding, a process which would be less likely to be affected by irregularities of texture than would chipping.

This reasoning would have more force were it not that the implements of other material, such as basalt, felstone, and greenstone, belong to the northern thick wedge type, while from their very wide distribution they cannot be supposed to be copies of the form originated in flint.

Now, we have in East Anglia one district in which flint implements have been manufactured from palæolithic to neolithic times, where gun flints have been made down to the present day, and where the best forgeries of arrow heads since the time of Flint Jack have been produced. We have here, therefore, opportunities of studying the forms into which one kind of flint breaks, both naturally and artificially, and the changes it undergoes in the circumstances which are there observed. The flint which seems to have been used from the earliest to the latest times occurs in large tuberous masses along the bedding planes of the chalk. At Brandon, for instance, in neolithic times there were excavations made along certain tracts of high ground to a depth of from 30 to 40 feet to reach the best layer of flint, which was then worked up on the surrounding area, which is consequently covered with fragments and unfinished specimens. I am not aware that there is any evidence as to where the palæolithic folk obtained their flint, but it could be easily dug all along the outcrop on the hill slopes.

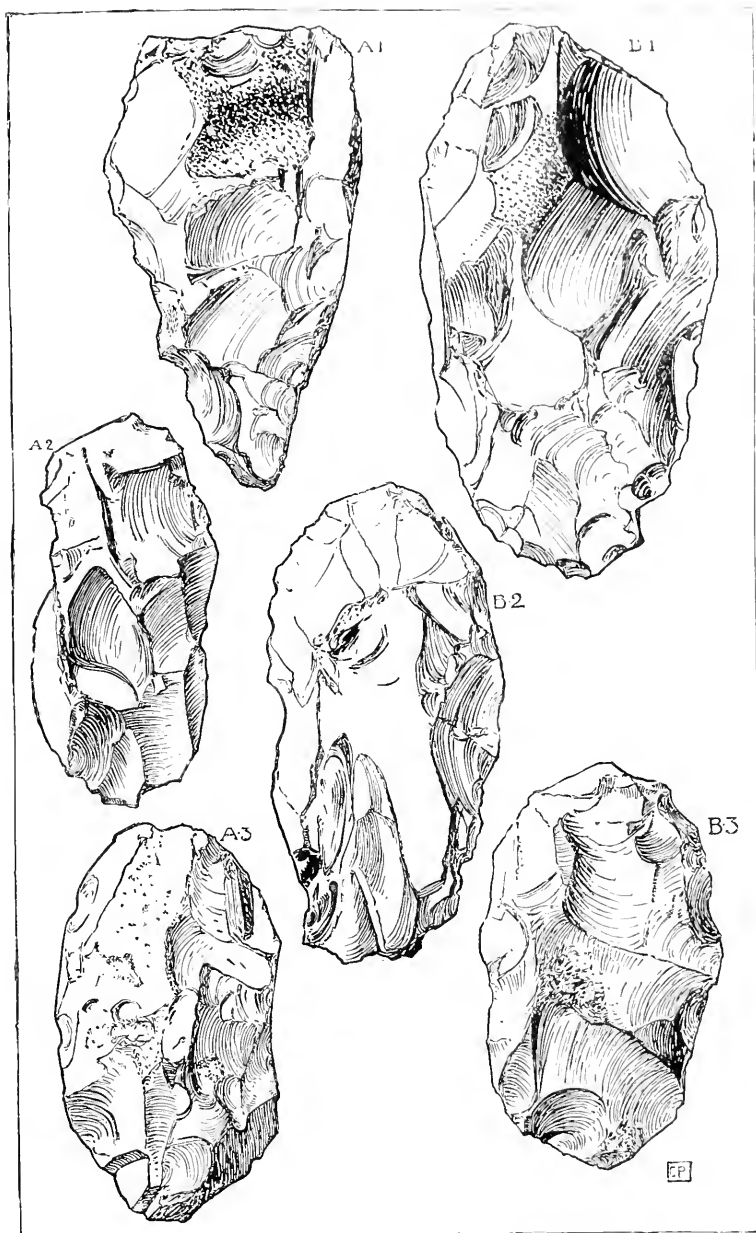
In certain places the gravel beds along the adjoining river valleys are full of flint implements, while in other parts of the district, and even in other parts of the same terrace of gravel, none or few have been found. To this point I return later on. If we examine the gravels in

which the palæolithic implements are abundant we find not only highly finished specimens but also many roughly trimmed flints, and, selecting intermediate forms, we soon realise that we have here the sweepings of a surface on which implements had been made from the stone of the district, and, therefore, we find the results of natural fracture and every stage of artificial trimming, so that hardly any two observers would draw the line between them at the same place. Numbers of examples may be picked up respecting which it might be said that probably, or possibly, primeval man had tried whether they would lend themselves readily to his trimming, but, being dissatisfied, had thrown them away; while no one could feel sure that many of the chipped edges which look so like the work of man might not have been produced by accidental causes. These doubts lend great importance to the enquiry as to the mode of formation of the deposit in which the implements and fragments occur. A selection of specimens illustrative of this point, namely the stages in the manufacture of a palæolithic implement, are represented in figs. B.1 to B.7.

If we examine the wasters and rejectamenta round Grimes Graves, the manufactory of neolithic age, we find there every stage in the process of trimming, from the untouched lump of flint to the implement which was finished as far as general form was concerned, and which wanted only the grinding down to make it into a polished celt. If we arrange some of these neolithic unfinished implements alongside of a series from the palæolithic gravels of Mildenhall we shall see at a glance that at any rate the early stages of the manufacture were the same. Although in the finished neolithic celt the sides are generally straight, whereas they are curved in the palæolithic, this difference does not appear in the earlier stages, but the neolithic implements also have in their earlier stages generally a curved outline, as may be seen in Figs. A.1 to A.10.

In fact, if these specimens had been found in the gravels of Mildenhall there would be nothing in their form to suggest that they were not of palæolithic age. Exactly similar forms have been obtained from the pits and surface deposits of the same age at Cissbury, and

PLATE I.



COMPARATIVE TYPES OF PALEOLITHIC AND NEOLITHIC FLINT IMPLEMENTS.

similar forms have been found at Pressigny—compare Figs. A.7, A.8, A.9, B.7.

Two inferences of first importance may be drawn from an examination and comparison of a large number of such specimens :

First, that the change of form from palæolithic to neolithic does not of itself indicate any great advance or any sudden incoming of a new race or introduction of new conditions of life ; and,

Secondly, that unless other evidence is forthcoming, it is not possible to determine whether unpolished elongate ovate implements are finished palæolithic or unfinished neolithic forms. The occurrence of the elongate cusp-shaped forms—that is, of tapering implements, the sides of which have an inward curve instead of an outward bulge—is generally an indication of the palæolithic age of the deposit in which they occur, for that form does not lend itself to development into any neolithic implement. There are some neolithic implements with inward curving sides, but they are rare, and never taper to a point.

What seems to have chiefly determined the form of these implements was the desirability of trimming them to the shape which could most easily be ground down afterwards on a polissoir.

The conditions of the surface of flints is a subject which has received but little attention, and yet it must be allowed to be of great significance in the endeavour to trace the vicissitudes through which the implements have passed, and in the explanation of the origin of the deposits in which they occur. Surface or gravel flints are all broken and weathered, and therefore present a very different aspect from the tuberous masses, or the tabular pieces which we find in place in the chalk or in the chalky boulder clay. But when we come to examine them more carefully we soon see that there are fractures due to blows, and fractures produced by the unequal expansion of the mass under changes of temperature, amount of moisture, etc. We also notice that these fractured surfaces have been rolled and worn, been acted upon chemically, have been coloured by infiltration or bleached by exposure to the atmosphere or moisture.

These are effects which can be distinguished, described, and pointed out in actual specimens, but cannot easily be reproduced in illustrations.

The breakages due to blows show a conchoidal fracture which is related to the double cone which I have elsewhere described.¹ The bulb of percussion, which is a portion of the truncating cone, is generally to be detected on the margin of the flint where the blow was delivered.

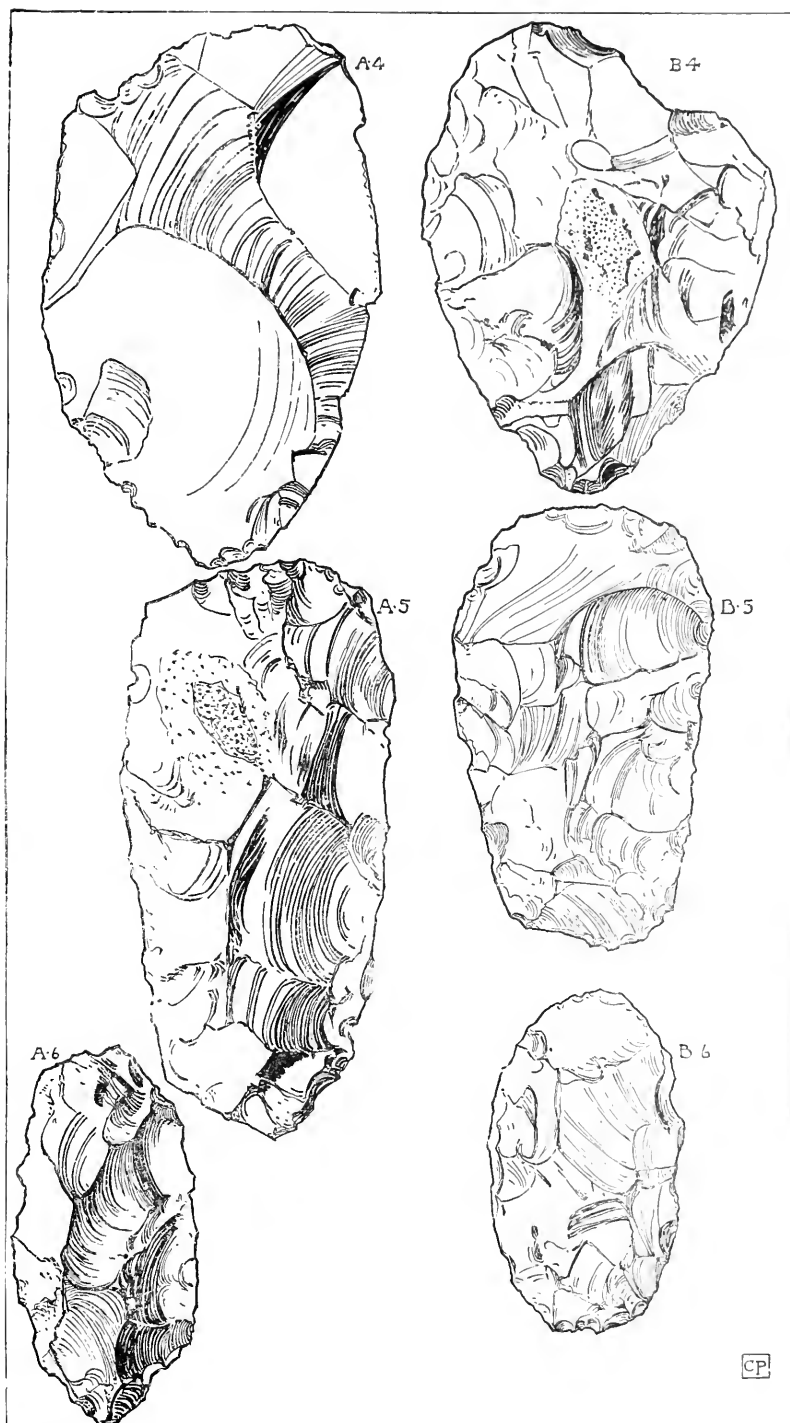
The fractures due to unequal expansion and contraction appear first as long, curved cracks, sometimes completely circular or oval, sometimes dividing the surface into segments like phases of the moon. When these cracks are developed, pieces come off, leaving large pan-shaped hollows, or the whole flint breaks up into fragments.

These pan-shaped hollows must not be confounded with the small depressions due to blows which are found on "pitted flints." And the general break-up of a flint under atmospheric agencies can be easily distinguished from the "hackly fracture" which is produced by fire, as when flints are caught in burning weeds. Such fractures, whether due to blows or to the unequal expansion and contraction above mentioned, are both of them indications of exposure on the surface of the ground, and differ in their results from the innumerable taps by which an irregular mass of flint is reduced to a pebble on the shore or the protuberant parts are worn down by attrition in a river. It is not at all uncommon to pick up a flint implement the upper and under surface of which are in a totally different condition, the side which has been exposed to the air being often quite white and patinated, and the under side exhibiting almost the original black surface of the flint. Now, if we examine a very large number of flints, so as, by multiplication of examples in all stages of surface decomposition, to get results comparable to those derived from experiment, we shall find that in some cases the black flint is overspread with cloudy blotches of white, while in others it is covered with minute cracks picked out in white. From such

¹ Soc. Antiq. Lond. Vol. IV, March 19, 1868, p. 95. *Geol. and Nat. Hist. Repertory*, May 1, 1868, No. 34, p. 126.

Proc. Camb. Phil. Soc., Vol. III, Nov. 6, 1876, p. 12.

PLATE II.



COMPARATIVE TYPES OF PALEOLITHIC AND NEOLITHIC FLINT IMPLEMENTS.

observations we arrive at the conclusion that the bleaching of the flint is due to the alteration of the exterior portion, and that the process is facilitated by the production of a great number of very small cracks. In fact, we find by experiment that the whitening may be caused by the cracks alone, but, as a matter of observation, it seems probable that it is produced chiefly by the removal of the more soluble colloidal portion of the flint, and that this process is made easier by the breaking up of the surface of the flint by cracks. But this removal of the colloidal flint is not a sub-aërial process. The most conspicuous examples of it are seen in tertiary pebbles imbedded in moist clays and loams, where the whole pebble is often affected, being converted into a white chalk-like substance of comparatively small specific gravity, but consisting, according to the analyses of Rammelsberg, of pure silica. It may be observed in this connection that the surface of all flint pebbles is scarred over with minute curved cracks, which are the sections of the small cones produced by the pounding of the stones upon the beach.

The white porcellanous patina of flints that have long been subjected to sub-aërial weathering without wear is different from that porous, chalky texture which is the result of the removal of part of the flint as described above. Under this patina, however, there is often a layer of the more porous material, so that, if a flint which has obtained a smooth patinated surface, with a layer of the porous residue of solution beneath it, has subsequently suffered wear and tear of any kind, we frequently find the porous under layer showing in patches through the shiny patina. Thus making it probable that the patina is not merely the surface condition of the porous white silica, seeing that it occurs on flints which have no layer of the porous silica beneath it, but is not reproduced on the porous flints which have once been covered with the porcellanous patina, but have afterwards been subjected to abrasion or fracture which has removed it in places.

Such a process is gradual, and we find flints in every stage of weathering, from the black flint slightly clouded here and there with flocculent patches to the white

porcellanous patina covering the whole surface. If a flint suffers a new fracture during the process, the different stage in the weathering of the newly exposed surface is apparent; or, if the flint has been turned over we notice the difference between the face which had been long exposed and that which had been in contact with the damp soil and been protected from the light and heat. Every new fracture is, therefore, characterised by its own stage of weathering, and it can generally be seen at once whether any implement is the result of dressing all at one time, so that all the faces are uniformly weathered, or has been retrimmed at any time after the fracture, perhaps, of the original specimen. From such observations also it can be determined whether any flint which is claimed as the result of human agency has received its form at one time or whether the specimen does not, on the contrary, show that the fractures which have given it a worked appearance have been produced at various times so as to suggest surface accidents rather than design.

We may now consider the mode of occurrence of the implements between which we are instituting a comparison.

The neolithic instruments of Grimes Graves or of Cissbury occur in almost identical circumstances. A number of pits were sunk to win the layer of flint which was considered to be the best adapted for the purpose. When as much of the flint had been got out as could be conveniently obtained from any one of these excavations without undermining too far, a new pit was sunk, sometimes with a tunnel into it from an adjoining pit, and the disused pit was filled up again with the chalk and surface deposits which had been dug out in sinking it. As the work of dressing the flint was carried on all round the pits, the infilling was full of the waste, and therefore we find here cores, flakes, and chips and various "misfits," with the certainty that they have been lying there in the chalky soil since the pits were filled.

These flints show, therefore, many stages of surface weathering which they had undergone before they were buried, and the results also of such changes as were brought about in the soil in which they have been so long imbedded. They have generally a black mottled or

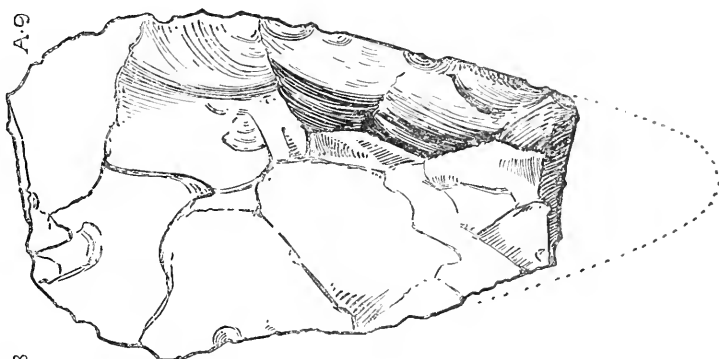


COMPARATIVE TYPES OF PALEOLITHIC AND NEOLITHIC FLINT IMPLEMENTS.

D-7



A-9



A-3



A-7



wholly white surface, but only in very exceptional cases any iron stain.

Thousands of fragments from the old workings never did get buried, but still lie scattered over the surface of ground where they are subjected to every kind of accident producing fracture and weathered surfaces. We see some on which the direction and character of the blows given by design are obvious, but which have subsequently been knocked about and chipped at different times as they lay on the surface of the ground, and the weathering, as we have explained above, tells us exactly the order of occurrence of these later accidental fractures. Others have yielded to the expansion and contraction due to changes of temperature and moisture.

The same processes attacked these dressed flints as have been acting upon the natural fragments which cover the ground. If such a collection of flints were swept together by any agency we could easily see that they had once been scattered over the ground, and subjected to fracture at various intervals, and also to long continued surface weathering.

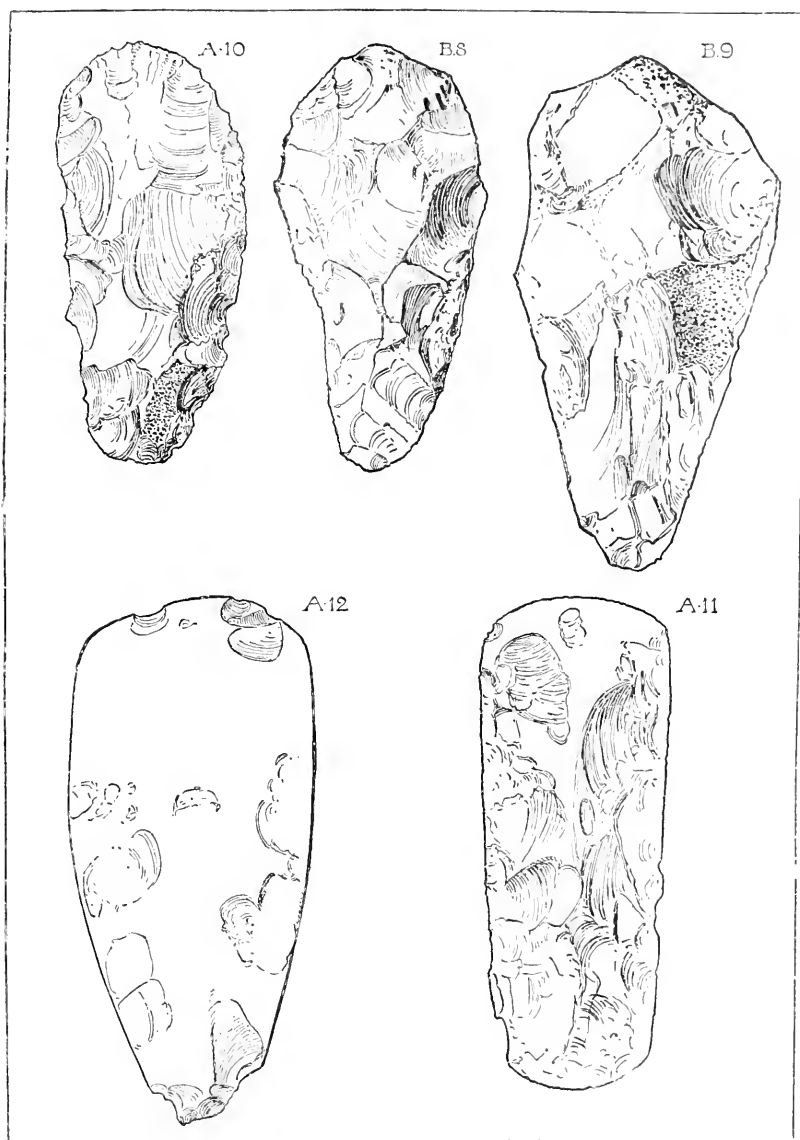
The palæolithic implements, on the other hand, are most commonly found in terraces of gravel having a definite relation to river valleys.

They are sometimes found on ancient surfaces, even when there is no gravel beneath. But the specimens with which we are more especially concerned with a view to our present enquiry are found in connection with valley terraces. The gravels in which they occur are never much rolled. So obvious is this that we are able to pick out the pebbles of eocene age, for instance, from the flints which belong to the pleistocene gravel. There is no such thing as a much-rolled gravel among these pleistocene deposits. Further we see that the fractures on the flints of which they are composed are of many different dates, and that they were weathered for longer or shorter periods before they were imbedded in the gravel. Moreover, they are fractures, which by their character are seen to have been the result of surface accidents, of blows, and of expansion and contraction. Flint implements imbedded in these gravels partake of the same characters. Those that were buried soon after they were made, before they received

any accidental fractures, are equally and evenly weathered on all the faces; those that were long exposed on the surface before they were imbedded in the gravel show by the different ages of the weathered surfaces the successive accidents that caused the newer fractures. In fact, we may safely infer that all the valley gravels in which the implements have been found are made up of ancient surface soils, the downward creep of which has been arrested by the river bed, but they have suffered very little onward rolling. A great talus received by the flooded river was heaped into a gravel bed, which was then left at rest until some change in the path of subsequent floods shifted it to another part of the valley. But there is never in the whole mass, and rarely in individual bones, implements, or naturally fractured stones, any evidence of continuous rolling action of the river. There is generally evidence of transport seen in the rough sorting of the material in any section of such gravel and sand, but there is nothing like what is done by the sea, such as may be seen, for instance, in the case of the originally angular flints and implements of the Solent gravel, where masses of it have fallen on to the seashore at the foot of the Barton Cliffs, and the sub-angular flints are being rolled into pebbles. Bands stained by oxides of iron show where the water levels have been long stationary, but this stain does not obliterate the evidence of the successive fractures and weatherings which the fragments underwent when exposed on the surface of the ground long before they had been arrested at the bottom of the valley.

In this way we may perhaps account for the variety of forms of palæolithic implements found in one gravel bed. They may not be of the same age, for we infer that they were not dropped into the river, but came down with the soil creep and the rain wash, and represent an enormous lapse of time. Here is a satisfactory explanation of the occurrence of rudely dressed fragments and of flakes all showing signs of wear and weathering. We have here the refuse of an implement manufactory. Instead of imagining that early man sat in a canoe, or on the ice, or on the shore to make an implement, and threw the refuse into the water, we see by the state of the implements and fragments that they lay long on the surface of

PLATE IV.



COMPARATIVE TYPES OF PALEOLITHIC AND NEOLITHIC FLINT IMPLEMENTS.

the ground. Through those ages important geographical changes were brought about, so that at the close of the period many plants and animals which were common at its commencement no longer existed in the same area. From these considerations it would appear not improbable that the duration of the palæolithic age has been underestimated while the interruption between palæolithic and neolithic times has been exaggerated.

The impression that there is a great break between palæolithic and neolithic seems to have arisen from the belief in the difference in the character of the implements belonging to the two ages, from the contemplation of the biological changes which have taken place since the time of palæolithic man, and from the study of the relation of the gravel terraces to one another and to the physical geography of the district.

If we have regard to the manner in which the rude instruments of savages are suddenly superseded by those introduced by more civilized races, we see that that kind of change does not imply any great lapse of time, although there may have been any interval between the newer and the older conditions.

This kind of importation of different forms seems, as we have shown, to have taken place along the east coast of England, where the bulging polished stone weapons, similar in form whether made of greenstone, flintstone, or the mottled flint of the northern area, appear to have been introduced into the district where the polished implements manufactured out of the black flint of the country were of the thin chisel form. But the sudden incoming of something quite different does not appear in the manner in which the neolithic types occur in a district in which palæolithic implements had long been made. There is not between the palæolithic and neolithic of East Anglia that change in the material which we see between the bulging northern neolithic celt (Fig. A.11) and the chisel shape of the fenlands (Fig. A.12), but only an advance in the manufacture from rough chipping to polishing, and a gradual modification of form to facilitate grinding down the edges and sides.

The second point seems at first to be more difficult to explain. If between palæolithic and neolithic times

animals and plants had become largely modified, that would in the present state of our knowledge lead us to infer that there had been a great lapse of time between the two periods, and considerable geographical changes which it is generally supposed require a long time for their consummation. But most of this evidence breaks down on closer examination.

In the first place a very large proportion of the forms of life which characterise the palæolithic deposits are only locally extinct. Some seem generally to have attained a larger size, and to have been of coarser build, but that is only what we observe if we compare the red deer of the fens with the smaller animal still common in the British Isles. The bison of the rivers of East Anglia disappeared, but we have seen the bison disappear in America in one generation. The wolves have been driven to the forests and mountains, and the lions to the deserts in recent times.

The hyæna, hippopotamus, bear, and lion, and other animals of the gravel which formerly were assigned to extinct species, are now found to be the same as those still living. They have only been compelled to move on.

Other animals, such as the urus and Irish elk, seem to have lived through the age of transition.

The relation of the river terraces to one another, and to the physical geography of the district, points to a long period, during which the material which we find in the river terraces was being accumulated on the surface. The terraces in which these old surface soils are preserved are themselves of different ages. There is no proof of any gap or break or cataclysm, but only of continuous changes, sometimes delayed sometimes hurried up by earth movements, of the recurrence and importance of which we have abundant evidence.¹

If these views are correct we may expect to find some of the ancient surface soils caught on ledges, or on slopes of small gradient on the flanks of the hills. There are areas over which the soil-creep is slow and the surface soils are of great antiquity. There are conditions where the flints are buried in the "head" or "rain wash," or

¹ *Journ. of Trans. Vict. Inst.*, March, 1880. *Proc. Camb. Phil. Soc.*, 1893, pp. 98, 219; Vol. IX, 1896, p. 114.

“run o’ th’ hill” or trail, or whatever we may call the surface accumulation. Such flints, after lying embedded for ages, are again exposed by sub-aërial agents, and again subjected to surface wear and tear. The stain they received when buried sticks to them long after their exposure, and they may show evidence of many successive ages of entombment and exposure.

What wonder, then, that in high terraces which represent old surface soils, on high grounds where ancient surface soils still lie, there should be found many a flint curiously fractured by frost and sun, or by the tramp of heavy animals!

What more likely than that some should be much chipped along an edge which the form of the flint caused to be oftenest presented to accident! But unless the fractures are along the parts of the flint which are not exposed to accidental blows, unless the *condition* of the exterior shows that these fractures were all made at one time, there is no evidence of design. If the terrace gravel is not distinctly a gravel of water transport, and not merely a terrace of arrested soil-creep, there is no evidence of great antiquity.

I must say that I have never yet seen any evidence which would justify the inference that any implements older than palæolithic have yet been found. Palæolithic implements finished and unfinished are frequently to be picked up on the surface, and with them many flints naturally fractured into curious forms, and if any one lays himself out to find bill-shaped, hook-shaped, half-moon-shaped flints, with the inner or outer edge chipped, he can easily obtain such a number as would allow him to urge with some plausibility that there was evidence of design shown in the frequent occurrence of similar forms. The design is in the selection of accidental forms, not in the manufacture of serviceable instruments. The term palæolith seems, therefore, unnecessary at present, as there is nothing to which it can be applied, and as it will be long before it can be asserted that we have discovered the very earliest trace of man it will probably be long before the word is wanted.

DESCRIPTION OF PLATES.

The figures are grouped so as to facilitate comparison between the Neolithic and Palæolithic forms, especially in their earlier stages. A. indicates Neolithic; B. Palæolithic.

PLATE I.

- A.1 to A.3. Unfinished implements from Cissbury (Neolithic).
 B.1 „ B.3. „ „ „ the gravels of Mildenhall (Palæolithic).

PLATE II.

- A.4. Unfinished implement from Grimes Graves (Neolithic).
 B.4. „ „ „ Mildenhall (Palæolithic).
 A.5. „ „ „ Cissbury (Neolithic).
 B.5. „ „ „ Mildenhall Gravel (Palæolithic). This specimen approaches the Neolithic type in the straightness of the sides.

PLATE III.

- A.7. Implement almost ready for grinding. Grimes Graves (Neolithic).
 A.8. Oval tapering form from Grimes Graves (Neolithic).
 A.9. „ „ „ „ Pressigny (Neolithic).
 B.7. „ „ „ „ Mildenhall (Palæolithic).

PLATE IV.

- A.10. Tongue-shaped implement. Cissbury (Neolithic).
 B.8. „ „ „ St. Acheul (Palæolithic).
 B.9. „ „ „ Allington Hill, Cambs. (Palæolithic). This specimen was found *in situ* in the gravel by Mrs. Hughes.
 A.11. Straight-sided thin chisel, fen type, ground at one end only. Burwell Fen, Cambs. (Neolithic).
 A.12. Bulging thick wedge-shaped, northern type, ground all over. Horningsea, Cambs. (Neolithic).

THE PRESENT PHASE OF PREHISTORIC ARCHÆOLOGY,
BEING THE OPENING ADDRESS OF THE ANTI-
QUARIAN SECTION AT THE DORCHESTER MEETING.¹

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1. *Introductory.*

In choosing a subject for the address to the Antiquarian Section of the Institute, it has occurred to me that the present phase of prehistoric archæology is fitting from the point of view both of the time and of the place. Since I last had the honour of occupying the chair at Scarborough in 1895, archæological interest—if I may use the term—has been principally directed towards the beginning and the end of the Prehistoric period, and more especially towards the study of the events which happened in the beginning of the Neolithic age on the one hand, and on the other towards the frontier dividing the Prehistoric period in Middle and Northern Europe from the Historic period in the Mediterranean region. In the former connection the materials for generalisation are being rapidly collected, and are available for criti-

¹ Read at Dorchester, August 3rd, 1897.

cism; in the latter, thanks to A. J. Evans and others, we can now bring the inhabitants of the British Isles in the Prehistoric Iron age into close touch with the civilisation of the Adriatic and Ægean seas at the dawn of history, at a time when there were great westward migrations going on in the South, similar to those that have given rise to the existing nationalities in Middle and Northern Europe. It is manifest that the time is opportune to discuss the value and define the scope of the researches which have opened up these questions. The place, too, is opportune. We stand here within the lines of a Roman fortress, and we are surrounded by the relics of the ancient inhabitants of the ages of Bronze and Iron—the countless tumuli of the downs, and the group of fortified strongholds that kept watch and ward over the land of Dorset, a land that was in communication with the Continent long before the Roman arms were felt on the shores of the English Channel.

2. *The Relation of the Prehistoric to the Pleistocene Period.*

Before we can discuss the problems offered by the study of the beginning and of the end of the Prehistoric period, it is necessary to clear the ground by defining what is meant by the term “prehistoric.” For me it covers all the events which took place in the interval between the Pleistocene and Historic ages.¹ It is the last but one of the great biological divisions into which the Tertiary period naturally falls. It is mapped off from what went before, not only by the absence of all the extinct mammals except the Irish elk, but by the appearance of the short-horned ox, the sheep, goat, the domestic hog, and the dog, hitherto unknown in Europe—in a word, by the introduction of the domestic animals. Some of these reverted to their aboriginal wildness, and shared the forests and prairies with the indigenous wild animals. Their remains in the refuse-heaps and burial-places, as well as in the surface deposits, peat-bogs, alluvia, and submerged forests, mark the Prehistoric from the Pleistocene age. They were derived, as I have proved elsewhere,² from the South-east, and introduced into Western

¹ For further details see Boyd Dawkins, *Early Man*, p. 257 *et seq.* ² *Op. cit.*, c. viii.

Europe by Neolithic herdsmen migrating westward and northward, and ultimately reaching the British Isles. The arts of husbandry and gardening, of spinning and weaving, of carpentry, of boat-building, of mining, and of pottery-making were brought in at the same time and probably from the same source. They form a striking contrast with the few primitive arts, such as sewing, and the manufacture of personal ornaments and rude implements of the chase, possessed by the Palæolithic hunters of the Pleistocene, although the latter were infinitely superior in the delineation of animals both in the flat and in the round, in drawing and in sculpture. This striking contrast in arts is, in my opinion, the necessary result of the great revolution in geography, climate, and distribution of animals, separating the continental Britain of the Pleistocene from the insular Britain such as it is in its main outlines to-day, which took place, as we know from geological considerations, at the close of the Pleistocene period, and in an interval of unknown, but probably vast, duration. In this direction, therefore, the Prehistoric period is divided "by a great gulf fixed" from all that went before.

3. *The Relation of the Prehistoric to the Historic Period.*

It is not, however, clearly defined from the Historic period which followed after. No great climatic, or geographical, or zoological, change took place in Europe from that time down to to-day. The new Prehistoric animals introduced under the care of man grew and developed into the present domestic breeds. The small Neolithic short-horned ox, for example, lived on in Britain, and is now represented by the small, dark Welsh, Scotch, and Kerry cattle. In Asia Minor I have identified it in a refuse-heap explored by Schliemann in the ruins of Troy, as well as in a cave explored by Sir William Dawson on the slopes of Lebanon. The new arts are those from which the civilisation of Europe has been evolved in later times. And, lastly, the introducers themselves are represented in the existing population by the small, dark Iberic element in the ethnology of Spain, France, and Britain. It is obvious, therefore, that there

is no hard and fast line here, and that the term "pre-historic" has only a relative value. If, for example, the Historic period in Egypt, dating back to 4,000 years B.C., be compared with that of Britain, beginning with the invasion of Julius Cæsar, it is clear that the Prehistoric period in Britain overlaps the Historic period of Egypt. It is in this direction that the archaeological interest centres, and to this overlap I shall address the latter part of this discourse. I now turn to the bearing of recent discoveries upon the interval between the Pleistocene and Prehistoric periods.

In my address at Scarborough I had to allow that all the attempts to bridge over this interval had been failures so far as Western Europe was concerned. Since that time the question has been discussed by A. J. Evans in his address to the Anthropological Section of the British Association in 1896, and by Dr. Munro in his two recent works.¹ Both hold, with some hesitation, that it is bridged over by recent discoveries in the caverns of the south of France. We will analyse the evidence in some detail, beginning with the cave of Reilhac, in the Pyrenees.

4. *The Evidence of the Cave of Reilhac (Lot).*

The greater portion of the contents of the cave had been removed and scattered before it was visited by MM. Cartailhac and Boule, who placed the discovery on record.² There were, however, some areas inside which gave the following section from the surface downwards:—

- A. Dark loam with more or less stalagmite, with layers of charcoal, bones of sheep, goat, *Bos longifrons*, hog, stag, and horse, and Neolithic axes and their sockets, made of antler, splinters of flint, and fragments of pottery.
- B. A stratum largely consisting of a breccia of rabbits' bones, with an occasional layer of charcoal, in some places soft and riddled with the old burrows of badgers.

¹ Munro, *Bosnia - Herzegovina and Dalmatia*, p. 314, and *Prehistoric Problems*, p. 60 *et seq.*

² *La Grotte de Reilhac*, pp. 68, folio, Lyons, 1889.

- c. Cave earth with the usual Palæolithic implements, weapons of stone, bone, and antler, and the usual remains of Pleistocene mammals: reindeer, hyæna, and others. Molars of sheep were also found here.
- d. Clay with blocks of stone and Pleistocene animals.

The superficial deposit A is certainly Neolithic, and possibly B may belong to the same age. C and D are Palæolithic; but C is, in my opinion, proved to have been disturbed in later times by the occurrence in it of the domestic sheep. The cave, like many others, offered shelter to the Palæolithic hunters, and afterwards to the men who possessed domestic animals, clearly proved by discoveries elsewhere to belong to the Neolithic period. It tells us absolutely nothing as to the length of the interval between the two occupations, and contributes nothing to the solution of the problem. I am unable to follow MM. Cartailhac and Boule in their conclusion that the interval is narrowed because the deposits shade off into each other, without hard and fast lines.¹ The strata in caverns are formed irregularly, and while in some places a great thickness of materials, including stalagmite, may be accumulated in a comparatively short time, in others there may be either little or none during untold ages. From my experience in cave-digging, and more particularly in the caves of Cresswell, I have learned the extreme difficulty of ascertaining whether a given stratum has been disturbed after its deposit. I have repeatedly met with remains of widely separated ages mingled together in the same deposit, either by the burrowing animals—foxes, rabbits, badgers—or by the hand of man. Under these circumstances, I am unable to see any proof that the interval has been either bridged over or narrowed by the discoveries in the cave of Reilhac.

5. *The Evidence of the Deposits at Mas d'Azil.*

Nor is the evidence more satisfactory which is offered by the refuse-heaps on the banks of the Arize and in the

¹ *Op. cit.*, p. 15.

rock shelter of the Mas d'Azil (Ariège).¹ The section is as follows:—

- A. Superficial stratum with Neolithic axes and objects of bronze and iron.
- B. Earth with deposits of wood ashes, and containing flat harpoons made of stags' antler.
- C. Earth mingled with ashes and large blocks of stone, containing flint flakes, scrapers, perforated teeth, bone pins, awls, chisels, and harpoons, similar to those of B. Here also were found pebbles painted with red ochre in spots and lines. Bones of horse, ox, and other animals were met with, as well as grains of barley and stones of various fruits, among which was the cultivated plum (*Prunus domestica*).
- D. A black layer with flat harpoons of stags' antler, similar to those in stratum C, and flint implements, and Palæolithic remains, including round-shaped harpoons, similar to those in the stratum below. It is obviously a mixed deposit, containing articles of different ages.
- E. A deposit containing Palæolithic implements, with reindeer and other Pleistocene mammalia occupying the floor of rock.

In this case, as before, I can only see evidence of sequence, without anything to mark the interval between the strata. The presence of barley in C is conclusive that C is not earlier than Neolithic, because it was one of the cereals introduced into Europe by the Neolithic farmers, and still more is its Neolithic age emphasized by the presence of the cultivated plum. The curious harpoons found both here and at Reilhac, and considered by MM. Cartailhac and Piette, and with some hesitation by Dr. Munro, to mark a pre-Neolithic stage of civilisation, occur in the refuse-heaps of Neolithic lake-dwellings in Switzerland, such as Wawyl, Moosedorf, and Cortaillod. They have been met with in this country in the Victoria cave near Settle,² and more recently in a cave near Oban,³

¹ M. Piette, *Congrès Int. d'Anthropologie et Archéologie Préhistoriques*, 1889, p. 203; *L'Anthropologie*, vi, p. 276, vii, p. 1 and p. 385.

² Boyd Dawkins, *Cave-hunting*, p. 112.

³ Anderson, *Proc. Soc. Antiq., Scot.* XXIX, p. 211.

and in both are referable to the Neolithic age. In a word, neither at Reilhac nor at Mas d'Azil is there any trace of a civilisation intermediate between the Palæolithic and Neolithic, but of one characterised by the possession of the domestic animals and cultivated plants, and clearly belonging to the latter. I cannot suppose that my colleagues, who consider that these two cases bridge over the gulf between Pleistocene and Prehistoric ages, are prepared to accept the further inevitable conclusion from their argument that there were clearings in Southern France in the interval between the Pleistocene and Prehistoric ages in which there were plum orchards and fields of golden barley.¹ These are the signs of a civilisation immeasurably higher than that which could have been possessed by a race of Palæolithic hunters, ignorant even of the dog, in their advance upwards towards the Neolithic domestic culture.

6. *The Discoveries in the Caves of Mentone.*

Let us now turn to another group of discoveries. The evidence obtained from the caves of Mentone,² based upon the human skeletons discovered from time to time since 1858 down to 1894, is taken by A. J. Evans to prove that here, if nowhere else, the interval between the Palæolithic and Neolithic ages is bridged over, and that here, in the Pleistocene period, we have the beginning of the existing population of the Ligurian coast.³

"It is true," writes A. J. Evans, "that in an account of the interments found in 1892 in the Barma Grande Cave, given by me to the Anthropological Institute, I was myself so prepossessed by the still dominant doctrine that the usage of burial was unknown to Palæolithic man, and so overpowered by the vision of the yawning hiatus between him and his Neolithic successor, that I failed to realize the full import of the evidence. On that occasion I took refuge in the suggestion that we had here to deal with an earlier Neolithic stratum than any hitherto recorded—'Neolithic,' that is, without the Neolithic.

¹ For a complete list of the plants see *L'Anthropologie*, vii, p. 1.

² For principal references to the literature of the Mentone caves see A.

J. Evans, *Journ. Anthropol. Inst.*, xxii, p. 287 *et seq.*

³ Address to Anthropol. Sect. of Brit. Assoc., 1896.

"But the accumulation of fresh data, and especially the critical observations of M. D'Arcy and Professor Issel, have convinced me that this intermediate position is untenable. From the great depth below the original surface of what in all cases seem to have been homogeneous quaternary deposits at which the human remains were found, it is necessary to suppose, if the interments took place at a later period, that pits in many cases from 30 to 40 feet deep must have been excavated in the cave earth. But nothing of the kind has been detected, nor any intrusion of extraneous materials. On the other hand, the gnawed or defective condition of the extremities in several cases points clearly to superficial and imperfect interment of the body; and in one case parts of the same core from which flints found with the skeleton had been chipped were found some metres distant on the same floor level. Are we then to imagine that another pit was expressly dug to bury these?"

The whole question hinges on the age of the cave earth, and on the further question as to whether it has been disturbed or not. Is the cave earth of Pleistocene age, and is it now in the position which it occupied in the cave at the close of the Pleistocene age? The presence of extinct animals gives an affirmative answer to the first of these questions, while the second is, in my opinion, negatived by the fact that "the floor had been lowered by natural agencies before any excavations had taken place."¹

This conclusion is strengthened by the presence of domestic animals, such as the goat,² at about 8 metres from the present surface. The interments themselves were undoubtedly made close to the surface at the time, and, in my opinion, were covered up afterwards by the drift of cave-earth from caverns at higher levels during heavy rains.³ Were they of Pleistocene age, the hyænas, which abounded at that time in these caves, would have eaten up the human remains, exactly as they ate up all the other mammals which were their contemporaries. It is a significant fact that no characteristic Pleistocene mam-

¹ Evans, *Journ. Anthropol. Inst.*, xxii (1893), p. 289.

² Evans, *op. cit.*, p. 294.

³ M. Verneau (*L'Anthropologie*, vi, p. 539) is of opinion that the stratum in question has been *remanié*.

mals have been proved to belong to the age of any one of the interments, and that Neolithic axes have been found in the cave earth near the surface. So far as I can read the evidence, the whole group of interments in these caves belongs to the Prehistoric age, because of the occurrence of remains of domestic animals in the cave earth. They are probably older, as A. J. Evans concludes, than the Neolithic interments on the Ligurian coast, because neither polished stone axes nor pottery have been found along with the human skeletons. It does not, however, follow that they do not belong to the Neolithic phase of culture. The goat¹ is already in evidence, and before deciding on this point it will be necessary to have a complete catalogue of the bones of the animals found along with the interments.

The interments themselves present, as Mr. Evans points out, features of peculiar interest, well worthy of our attention. In all the bodies were buried resting on their side, and were covered with a layer of red ochre. Around their necks, wrists, and possibly ankles, were strings of perforated sea-shells (*Nassa neritæa* and others) and pendants of bone and teeth. Within reach were flint knives. There was no trace of pottery. The people who buried their dead thus were tall and long-headed, and identical, according to M. Issel, with the dwellers in Liguria from the Neolithic age down to the present time.

7. *The Burial in the Rock-shelter of Cro-Magnon.*

The same tall, long-headed type is presented by the skeletons discovered in the upper stratum in the rock-shelter of Cro-Magnon.² They were found along with similar ornaments of perforated sea-shells and pendants made of ivory, probably obtained from a mammoth tusk close by. From the iron peroxide on one of the skulls, it may be inferred that they were also covered with red ochre. They were buried in *débris* resting on a refuse-heap of Palæolithic age, and are therefore, in my opinion, of later date. They are, however, regarded as Palæo-

¹ The *Capra primigenia* (Gerv.) is merely a provisional name applied to large remains otherwise not to be distinguished from the domestic goat

(Gervais, *Compt. Rend.*, 1864, t. 58, p. 236).

² Lartet and Christy, *Reliquie Aquitaniae*, p. 62 *et seq.*

lithic by the principal French authorities, such as Quatrefages, Hamy, and others, on very much the same unsatisfactory evidence¹ as that of the caves of Mentone. Since the interment the *débris* from the cliff above has accumulated over the rock-shelter to a thickness of 4 metres.

8. *A Similar Burial in the Paviland Cave.*

Nor is this class of burial confined to Southern and Middle France. In 1824 Buckland² recorded the discovery of a human skeleton in the Paviland cave, Glamorganshire, in an older accumulation of the Pleistocene age. The body had been interred resting on its side. Close to the thigh were two handfuls of perforated sea-shells (*Nerita littoralis*). In touch with the ribs were 40 to 50 ivory rods, from $\frac{1}{4}$ to $\frac{3}{4}$ inch in diameter and from 1 to 4 inches long, and fragments of ivory rings, which when complete were from 4 to 5 inches in diameter. Both skeletons and ornaments had been covered with a layer of red ochre. In another place were three fragments of ivory which had been cut, one of them into the shape of a human tongue, and an awl made out of the metacarpal of a wolf. Fragments of charcoal, a flint flake, and recent bones, scattered through the mass of cave earth, proved that the deposit had been disturbed by subsequent diggings. The ivory ornaments were probably made from a mammoth tusk, which was discovered in a crumbling condition in another part of the cave. Unfortunately, in the absence of the skull, the shape of the head is unknown. The long bones however, according to Falconer, imply a gigantic stature.

9. *A Similar Burial at Brunn, in Moravia.*

In grouping these three discoveries together I am only following Messrs. Pengelly and A. J. Evans. The fourth, for the details of which I would refer to Dr. Munro,³ was made in the loess, or brick-earth, of Brunn, in Moravia. Here, in the course of digging a canal in 1891, a stratum containing remains of rhinoceros, mammoth, and other Pleistocene beasts, was met with at a depth of 4 metres

¹ Boyd Dawkins, *Cave-hunting*, p. 249.

² *Reliquiæ Diluvianæ*, p. 82.

³ *Prehistoric Problems*, p. 161.

from the surface. As it was followed, a fragment of mammoth tusk was discovered resting on a shoulder-blade of the same species, and close to it the skull and some of the upper portion of a human skeleton. The rest had been removed during previous work. Along with the skeleton were button-like perforated discs of ivory and other perforated discs of stone and rhinoceros rib, ranging from $1\frac{1}{4}$ inches to $2\frac{1}{2}$ inches in diameter, two discs of limestone $5\frac{1}{2}$ to 6 inches in diameter, a rude human figure of ivory, and an implement of reindeer antler. There were also 600 fragments of *dentalium*, or tooth-shell from the Tertiary strata of the neighbourhood, that had been strung so as to form a head-covering or necklet. All were covered with a layer of red ochre. The skull is long and of the same type as those of Cro-Magnon and Mentone. The smaller discs above-mentioned were probably used for fastening clothes, and the larger for spindle-whorls, like those of Neolithic and later times. The largest may belong to the so-called net-sinkers:

10. *The Ivory Ornaments made of Mammoth Tusk.*

The ivory, bone, and antler, out of which these curious relics were made, were undoubtedly furnished by the tusks of mammoth and remains of rhinoceros and reindeer in the Pleistocene stratum. Here, as in Cro-Magnon and Paviland, the mammoth ivory must have been in the same state of preservation as the tusks in Siberia, now used by the ivory-turners, instead of being in its present decomposed state. Mammoth tusks have been met with in the same perfect condition in Scotland and in Yorkshire, and capable of being put to the ordinary use of ivory.¹ Their perfect preservation at the time of manufacture does not therefore carry back the interments to the age of the mammoth, or Pleistocene, as suggested by Pengelly in the case of Paviland, and of Brüm as suggested by Schaafhausen. It proves, however, that the interval between the time of the interments and the present day was sufficiently long to allow the process of decay to go on until both tusks and ornaments were reduced to the same friable condition in these three widely separated localities: in Moravia, Britain, and Auvergne.

¹ Buckland, *Rel. Diluv.*, 179.

11. *This Group of Early Prehistoric Age.*

In this group of remains so widely spread over Europe, we are on the track of a very early Prehistoric people, belonging to a tall, long-headed race, without the knowledge of pottery and without polished axes, if negative evidence be accepted. It matters little whether we follow M. Hervé and Dr. Munro in calling them Proto-neolithic or not. They represent, according to the present evidence, the earliest element in the existing European population. They are probably the advance-guard of the Neolithic migration, which is likely to have gone on slowly and spasmodically through long ages, like that of the Celts in later times. Further evidence is needed before we can define their relation to the Iberic inhabitants, or their precise relation to the Neolithic culture ordinarily so called.

In all these discoveries I see nothing to link the Palæolithic man of the Pleistocene with the Neolithic man of the Prehistoric period. The one stands on the far, the other on the near, side of the great gulf, marked by changes in the geography, in the climate, and in the zoology of Europe. On the other hand, the archæologists who cling to the Palæolithic age of the human remains found in Cro-Magnon hold that they are Palæolithic, and that the present population of Europe dates back from a time when the cave-men hunted the reindeer and trapped the mammoth in Middle and Southern France.

12. *The Neolithic Culture introduced into Europe west of the Rhine by Iberic Peoples.*

Whether the stages of civilisation marked in Northern and Western Europe by the use of polished stone, bronze, and iron, were the result of slow evolution going on among tribes inhabiting the plains of Europe and the uplands of Scandinavia from the Pleistocene age, so ably discussed by Huxley,¹ still remains a vexed question. *Quot homines, tot sententiæ.* They were undoubtedly the result of a slow evolution somewhere. I would suggest that it took place in a region inhabited by the River-drift men, who were ignorant of the arts of design—

¹ *Nineteenth Century*, November, 1890.

in Asia Minor or Southern Asia—rather than in that of the artistic Cave-men in Middle and Northern Europe. In this manner the contrast between the art of the latter and of the Neolithic peoples may be explained. For me the fact that the ancestors of most, if not all, of the domestic animals are unrepresented in the wild fauna of Europe is conclusive that it was not here. The dog, as Darwin has shown, is not the descendant of the wolf, but of the jackal, mingled by interbreeding with wolves and foxes. The domestic *Bos longifrons* has no relation either to the bison, or to the urus, of Middle and Northern Europe. The sheep and goat have been derived from a wild ancestry unknown in the area under discussion, and one of the breeds of domestic hog in the Neolithic age (*Sus palustris Rütemeyer*) has an origin in some region either in Middle or in Southern Asia. The larger of the breeds of hog are derived, like the domestic horse, from stocks indigenous in Europe, but the fact that these stocks are also indigenous in Middle and Northern Asia forbids the assumption that they passed under the dominion of man in Europe, and not in Asia. Looking at the matter purely from a zoological standpoint, it is clear that the domestic animals were introduced from the south-east. The evidence of the cereals, and even of the associated weeds—the corn-flower, for example—points in the same direction. The association of both domestic animals and cultivated plants with the Neolithic stage of culture, not only over the whole of Europe in the Prehistoric age, but also in North and South America as far down as the discovery by the Spaniards, is sufficient to identify them more closely with that stage of human progress, than with any other. We may then safely group all archaeological finds in which the domestic animals occur as Neolithic or later until clear proof be given that they are older than Neolithic. If they are older than Neolithic they still belong to the Prehistoric, and not to the Pleistocene, age. In deciding their age zoological considerations must have their due weight.

The question as to whether this civilisation slowly filtered northwards and westwards among the indigenous tribes already in possession of Britain, France, and Spain,

is one which cannot be answered with any precision. In these three countries it is clearly identified with the non-Aryan Iberic inhabitants, who are in my opinion—and Serghi holds practically the same view—of southern and eastern derivation.

13. *The Original Home of the Aryans uncertain.*

Whether the original home of the Celts (Goidels) who invaded France and Spain in the Neolithic, and Britain in the Bronze, age was in the plains of Germany and Russia, or those further to the east and south, is a question which has little or no bearing on the ethnology of Europe west of the Rhine. In this region, as in Britain, they are an invading race, and they represent the first wave of the Aryan migration, to be followed long ages afterwards by the Brythonic wave. Professor Rhys' view¹ that the latter were a more mixed race than the former, based on philological considerations, is probably true. The Goidel is clearly defined by his tall stature, lofty forehead, broad cheek-bones, blue and grey eyes, pent-house brows, aquiline nose and large mouth, fair complexion and hair, from all other races in Ireland and Scotland. The Brythons of Wales do not present any such uniformity, but just such a mixture of types as that suggested by Professor Rhys.

14. *The Ethnology of Britain at the Time of the Roman Conquest.*

Britain, when it was first known to the Romans, was peopled by three distinct groups of tribes, the Iberic, Goidelic, and Brythonic. The first came in in the Neolithic age, and are the ancestors of the small, dark inhabitants not merely of Ireland, and Scotland, and Wales, but also of many of the English counties, Yorkshire and Derbyshire in the north, Cornwall, Devon, Somerset, Dorset, and Wilts in the south. It is interesting to note that the Romano-British villagers of Woodcuts, in Cranbourne Chace, belong to this race, as General Pitt-Rivers has proved in his splendid monograph.² They were both pre-

¹ Rhind Lectures in Archaeology, *Scottish Review*, April, 1896, July, 1891; *Philological Society*, Feb. 20, 1891.

² *Excavations in Cranbourne Chace*, 4to, Vol. I.

Aryan and non-Aryan. The second, or Goidelic, after their conquest of Gaul in the Neolithic age, crossed the silver streak and the Irish Sea, and repeated in the British Isles, in the Bronze age, their conquest of the continent west of the Rhine. They swept alike over the Alps into Italy and over the Pyrenees into Spain. The third, or Brythonic, passed over into Britain before the close of the fourth century B.C. They had already given their name to our island before Pytheas, the great Massilian traveller, sailed the western seas in the year 325 B.C.,—how long before we do not know. They probably belong to the group of Gallic tribes who conquered the lower basin of the Po at the beginning of the fourth century B.C., sweeping through the Alps, and passing in the following century eastwards to the attack on Greece and the foundation of the kingdom of Galatia in Asia Minor.¹ The Belgæ are also later Brythonic invaders, whose conquest of Britain was arrested by the Roman arms.

15. *The Veneti and their Influence.*

The insular Belgæ carried on a close intercourse with their Continental kinsmen, and the aid which they gave to the Armorican League was the proximate cause of the invasion of Britain. In this league, the Veneti of the Morbihan stand out as the great seafarers and merchants. Their capital, Vannes, the Venetia of Cæsar, was in the west, on the shores of the Atlantic, exactly what the Venice of the east was in the Mediterranean. The British seas were familiar to their fleets, and their leathern sails were well known in the creeks and rivers of the southern seaboard.

What was the relation of the Atlantic Venice to her sister in the Adriatic? The Veneti of the latter, according to the legend of Antenor, came from Paphlagonia, and migrated after the siege of Troy to Thrace, and thence to the region extending from the Alps to the Adriatic, a region which commanded the southern outlets of the two great trade routes through Germany to the Amber coast.

¹ According to one account, the Tectosages carried back some of the plunder of Delphi to their capital,

Tolosa (Toulouse). Article Galatia, Smith's *Dictionary of Greek and Roman Geography*, 1878, Vol. I.

Thus the voice of tradition assigns to the Veneti the same Asiatic source, and proximately the same route, as the Tyrhenes or Etruskans, who established themselves in Italy some time close after their expulsion from Greece by the Dorian invaders in 1200 B.C. It is significant that the Etruskans were masters of these southern outlets to the trade routes up to the time of the Gallic invasion of 400 B.C. I will not venture in this place to plunge into the controversy as to the share which the Adriatic Veneti and the Etruskans had in the introduction of the Ægean, Mykenæan, and Italo-Greek arts among the farmers and herdsmen of the North. It may, however, be noted that the Etruskans were in possession of the only mining district in the Mediterranean where tin necessary for bronze is found: that of Cento Camarelli, near Leghorn.¹ They therefore occupied a commanding position in the bronze trade on the Mediterranean Sea, as well as in the overland trade to the Amber coast, in the Bronze and Iron ages.

In the opinion of Strabo (iv. 195), the Veneti² migrated into Italy from the region north of the Alps, like the Senones, Cenomani, and Lingones, and other Gallic tribes, who carved out Gallia Cisalpina for themselves with their swords. This view is strongly supported by the fact that the Veneti, both in Gaul and Italy, had for their neighbours the three Gallic tribes above-mentioned. They are described by Polybius as differing slightly from the Celts, but speaking a different tongue, a statement which may be explained on the hypothesis that they were Belgæ or P-Celts as contrasted with the Goidels or Q-Celts of Rhys.

These facts constitute very strong grounds for the view that the Venetians of the Morbihan and those of the Adriatic belong to one stock, more or less mixed with other peoples, and that probably Brythonic, and that they derived their taste for commerce and their seafaring capacity from one and the same source. They were the great maritime power in the Western Atlantic for an unknown period before the days of Cæsar. To them is due more than to any other known people the development of

¹ Boyd Dawkins, *Early Man*, p. 405.

² The Veneti are probably a different people from the Venedi of the Lower

Elbe, mentioned by Tacitus as rude barbarians—the probable ancestors of the modern Wends.

trade by which the Mediterranean arts were introduced into Britain. Ireland, as Montelius and A. J. Evans have pointed out, was the El Dorado of the North, and the amber of the Baltic was the objective of the two great overland routes to the Mediterranean. Through the Venetian traders the beautiful southern designs so conspicuous on the golden and bronze ornaments in Ireland might readily have been introduced, and characteristic golden ornaments of Irish manufacture have been distributed as far to the east as the Baltic. It was probably mainly through them that the southern designs and articles were brought into the lake village of Glastonbury, recently explored by Mr. Bulleid, and it is very likely that they had a preponderant share in introducing the "Late Celtic" culture which ultimately penetrated into every part of the British Isles. While, however, we emphasise the Venetian influence both in the Adriatic and in the Atlantic regions, we must not forget that the Belgic settlers in Britain were highly civilised, and that they had before been subjected on the Continent to the Italo-Greek and afterwards to the Massilian influence. The latter penetrated through Gaul along the trade routes, and, as Sir John Evans has proved from the study of the coins—such, for example, as the gold coins found in Hod fortress, near Blandford—arrived in Britain from 200 to 150 B.C. This "Late Celtic" culture, too, was based on an earlier civilisation belonging to the Bronze age, as well as to an early period in the Prehistoric Iron age.

16.—*British closely connected with Continental Tribes.*

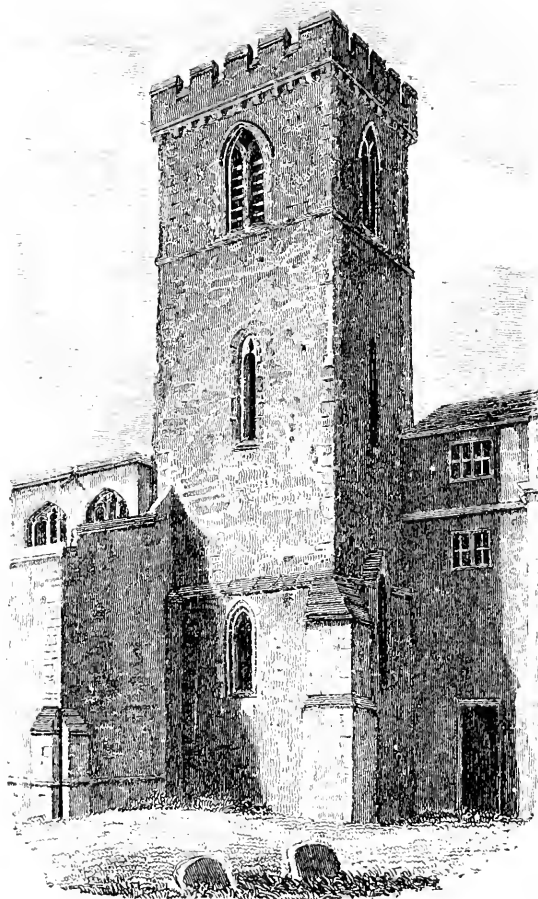
The impression left on our minds by all these facts is that the British tribes, at the dawn of history, were in close touch with the Continental civilisation. Those in the South stood and fell with the political organisation of their kinsmen and allies in Northern Gaul. British levies fought against the Romans in the memorable sea-fight which destroyed the maritime power of the Venetians in the West, and placed Britain at the mercy of the Roman fleets. The fall of the Venice of the west was naturally followed by the invasion and conquest of Britain.

17.—*The Archæological Work of the Future.*

I turn, in conclusion, to the archæological work which lies before us.

If we take stock of our knowledge of the internal condition of the British tribes, we find that it is very small. It is based mainly on the fragments of the lost history of Pytheas embedded in the works of later writers. What do we know, for example, about the Durotriges? They are almost a mere geographical expression. Their place in British ethnology is a guess, and their manners and customs, their habitations, and their fortresses, as distinguished from those of other Celtic peoples, are equally unknown. And this is the case in a land called after their name, and abounding with remains which await the scientific use of the pickaxe and shovel. Dorset, in its entrenched villages and fortresses, is a veritable "El Dorado," from which may be extracted, by the methods adopted by General Pitt-Rivers, untold archæological wealth. We have heard from him in his address this morning the story of the discovery of two forts of the Bronze age, which has gone far to fill a blank in our knowledge of the south of England. Why not carry on the work in filling the greater blank which exists in our knowledge of Dorset in the Prehistoric Iron age? The scientific exploration of one fortress, Maiden Castle, Hod, or Hamildon, would tell us more than all that has hitherto been done or written. The gold lies buried at no great depth from the surface. If you dig it and set it in circulation, you will earn the gratitude of all future students of the history of Britain. Within the boundaries of this beautiful county you have unrivalled opportunity of noble service in lifting the veil from that portion of the past where the Prehistoric shades off into the Historic period.

PLATE I.



CARFAX TOWER, OXFORD, IN 1819.

THE AGE OF CARFAX TOWER, OXFORD.¹

BY J. PARK HARRISON.

Much of the difficulty which has been met with in deciding what repairs ought to be done to St. Martin's tower, Carfax, would have been avoided, and the decision, at length adopted by the Oxford Council, to preserve all old features intact, would doubtless have been carried out, had the age of the tower and its several parts been previously ascertained.

We learn, indeed, from Antony Wood that the earliest mention of St. Martin's Church that he could find was in a charter of Canute's by which it was granted to Abingdon Abbey *circa* 1033; and he points out that this was some time after Canute became possessed of it; adding that many believed that Eadward the Elder, the son of Alfred the Great, built the church.

The Rev. Carteret J. H. Fletcher, the last vicar of St. Martin's previous to the union of the parish with All Saints' and the demolition of the church to improve the highway, in his recent history of Carfax church and parish, draws attention to the fact that the charter is not a foundation of a church, and that it was not known when St. Martin's Church was built. There was also a possibility that the present tower was not the original one.

History, then, supplying merely the bare information that Canute gave a church, dedicated in honour of St. Martin, to Abingdon Abbey, it rests with archaeology to ascertain whether any architectural evidence can be produced sufficiently distinctive to show that Carfax tower or any part of it is as old as Canute's time; and it will presently be seen that this is certainly the case.

But, first, it should be mentioned that two views have been propounded regarding the age of Carfax tower as it now exists; one that it is Early English, with the

¹ Read at the Monthly Meeting of the Institute, November 3rd, 1897.

exception of the exterior of the belfry stage, which was cased and materially altered about forty years ago; the other that only the lower part of the tower is Early English, the upper half having been rebuilt, apparently in the fourteenth century. Mr. T. G. Jackson, R.A., who is engaged on the restoration, and a few other experts adopt the latter view, with this important addition that there is older work inside. So the 16-inch walling round three sides of the tower, with Early English windows on two sides and angle buttresses at the north-west and south-west corners, are not part of the original tower. Indeed, there is constructive evidence which shows that they were built against tower walls of an earlier date.

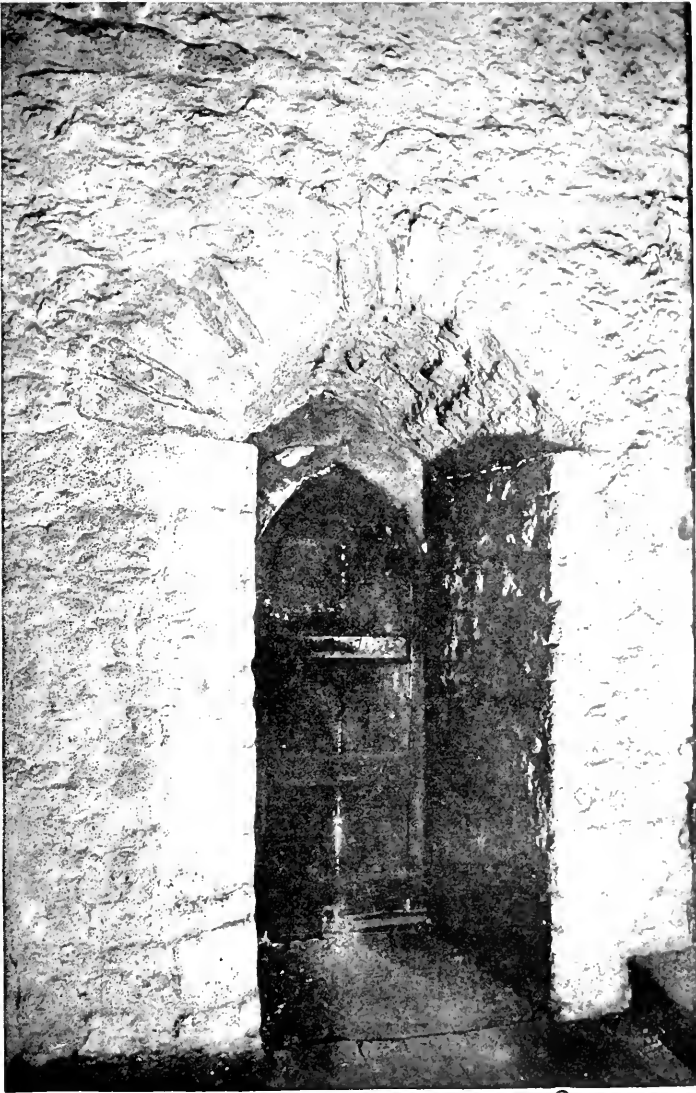
The Early English lancet window on the north side, it is important to note, was in recent times fitted with an oak doorcase and door, access being obtained to it by a low turret staircase of the same date, for which a tall turret, reaching some feet above the tower battlements, is now to be substituted. The window previous to its being converted into a doorway, and another lancet window on the west side, with an Early English gablet over it, and the angle buttress at the north-west corner, are shown in Plate I, as given in the *Gentleman's Magazine* of September, 1819, whilst the Early Decorated church was still standing.¹

The fact that an Early English window, which has since been converted into a door, took the place of an earlier doorway, which would have been reached only by a ladder, accounts for a fissure between its south jamb and the wall of the ancient tower. It was doubtless caused by the slamming of the door, which disrupted the mortar and small rubble between the old and new work.

Before proceeding, as some doubt appears to have been entertained whether the transcript of Canute's charter in the *Abingdon Chronicon* was genuine, it should be mentioned that Mr. Fletcher has no doubt on the subject; and Mr. Stevenson, the editor of the *Abingdon Chronicles* in the Rolls Series, accepts it. The reason for the doubt was simply that the term "famous" was

¹ It is from a drawing by Mr. Buckler, architect, and represents the tower previous to the nineteenth century alterations.

PLATE II.



SAXON DOORWAY IN CARFAX TOWER, OXFORD.

applied to Oxford.¹ But Mr. Fletcher points out that it was correctly used, Oxford being the frontier city of Mercia, and commanding the through route to the south as well as the traffic along the river.

The late Mr. Boase also in his history of Oxford says that it was an important town previous to 912, since its name is coupled with London in the *Saxon Chronicle*; and that it was the centre of a district. The fabulous antiquity once assigned to the city seems to have led to some disinclination to believe that even Saxon remains exist in Oxford; and it will only be by strict archaeological methods and by trusting to the testimony of the stones themselves that the mistake will be dispelled.

Having thus prepared the way, I have now to show what the evidence of age is that the early work inside Carfax tower provides. It consists in the presence of very distinctive features belonging to two ragstone arches in the north and west walls of the ringing chamber, and a doorway in the north wall, at some height above the ground, which at present preserves its original appearance. One of the distinctive features is inside the doorway, and another is inside an irregularly splayed window-opening in the west wall. The latter was altered in past times, but remains in evidence.

The distinctive feature referred to is a structural peculiarity common both in Roman and Saxon architecture, causing of necessity the span of arched openings to be wider at the springing than the width between the jambs or pier walls below. There is, I believe, no special name for the feature, but it may perhaps be termed a wall or recessed impost. The Romans used it to support centering on which their ragstone arches were turned. The Saxons appear to have copied the structural feature, at first without knowing how to frame centering, though eventually learning to do so, either through foreign intercourse or otherwise. The great irregularity in the form of Early Saxon arches would thus be accounted for.

Mr. Micklethwaite, who is an authority on the subject, informs us that this recessed impost continued in use to the end of the Saxon period of architecture.

¹ "In urbe que nomine famoso Oxanafordæ nuncupatur." (*Chron. Abing.*, Vol. I, p. 439.)

It is interesting to find that Oxford possesses four examples of this feature, the last discovered very recently. I propose to describe them in the order of their apparent age.

I. There are precisely similar wall imposts and irregular ragstone arches like those at Carfax in the wall at the north-east end of Christ Church Cathedral. They have been accepted as Saxon by experts in early masonry, and the remains are believed to be part of the small church of the Holy Trinity that is known to have been built by Didan *circa* 727, and is supposed to have been the earliest founded in Oxford. For reasons connected with the conversion of the church to conventual purposes by St. Frideswide, Didan's daughter, the wall and arches appear to have been religiously preserved; and they were restored, and the church enlarged by Ethelred II, as recorded in his charter of 1002; the roof, furniture, and books alone having been burnt when the Danes met their doom on St. Brice's Day in the tower where they had taken refuge.

II. A third example of this feature with the springing stones of the arch of what appears to have been a doorway is in the north wall of the present ringing loft of the tower of St. Peter's-in-the-East. Here, in addition to the wall impost, the walling to the height of 5 feet, which contains the ancient remains, is of a construction that may have been copied from Roman work elsewhere. The west wall is built in the same way up to the same height. Both wall and arch may have been built in the ninth century. (Plate III.)¹

III. A fourth example exists in a doorway high up in the north wall of St. Michael's tower in Cornmarket Street. Here it is to be noted that, although the arch is formed of ragstones, it is circular and apparently turned on framed centering; and there is a slightly moulded impost, which projects beyond the face of the wall, so that the span of the arch, though wider than the width of the doorway, is less so than in the three other examples. It should be remembered that St. Michael's was one of the towers that Mr. Rickman relied on as proving that there was a Saxon style of architecture; but the unfortunate

² The greater part of the tower is much still to be learnt from the appears to have been rebuilt; but there earlier work.

PLATE III.



REMAINS OF SAXON DOORWAY IN ST. PETER'S, OXFORD.

mistake made by a distinguished antiquary in assuming the two Saxon towers which are still in existence at Lincoln to be the ones recorded in Domesday Book, as having been built after the Conquest, led to doubts arising in the minds of Mr. J. H. Parker and others about the Saxon date of St. Michael's. This mistake was detected a year or two before his death by the late Precentor Venables, who showed conclusively that the two churches mentioned in Domesday were taken down three or four hundred years ago. Consequently the age of the two Lincoln towers remains unknown; and their architecture is no guide to the style of work that the Saxons had attained to by the Confessor's reign or some time previous to it. The important point in connection with the four examples of arches springing from wall imposts in Oxford is, that they occur in the case of churches standing on what are known to have been Saxon sites.

But it is not only this constructive feature that settles the Saxon date of Carfax tower, for, in addition to the doorway high up in the north wall, which also occurs, as before mentioned, at St. Michael's, and, as it would seem, formerly at St. Peter's-in-the-East, if the Early English buttress, lancet windows, and casing are in imagination removed, and the Early Decorated and modern work of the belfry, the proportions of Carfax tower would come out as Saxon; and the thickness of the walls on which the Early Decorated upper half of the tower was rebuilt is the same as at St. Michael's, and the mortar is of the same composition. Nor is this all. The line of the south wall of the original church was within the line of the Early Decorated nave, as seen on the east wall of the tower; and it was, as commonly the case in Saxon churches, lofty in proportion to the width of the building. In excavating foundations for an ornamental modern doorway for the tower, at its east side the lower courses of an Early English tower-arch of two orders were found. They were simply chamfered, and the width between the jambs was barely 6 ft. 3 ins. This archway was not in the centre of the tower, and appeared to have been inserted in the old uncased Saxon wall, probably at the time that the Early English casing was added on the other sides of the tower, perhaps whilst the original

church was standing. It looks as if there had been some doubt about the prudence of inserting even this narrow archway in the old 3 foot 8 inch east wall, and that this might also account for the addition of the 16-inch casing. If there was any previous communication between the church and the tower it may be assumed that it was through a narrow door that could be readily blocked and defended. Higher up there is a square, or rather an oblong, opening, with massive oak lintels. It is nearly in the centre of the east wall of the clock-room. It will, I believe, be made use of for the illuminated clock and supported by the ancient quarter boys, dressed in the costume of Roman soldiers which have been long preserved in the Corporation vaults; and will now renew their vocation, little, as appears, the worse for wear.

Proceedings at Meetings of the Royal Archaeological Institute.

ANNUAL MEETING AT DORCHESTER, August 3rd to
August 10th, 1897.

Tuesday, August 3rd.

AT 11.30 a.m. His Worship the Mayor of Dorchester (Alderman JAMES PAINE) received the members of the Institute in the Town Hall.

HIS WORSHIP briefly welcomed the Institute and expressed the hope that the members would spend a pleasant and profitable time during their visit to the town and county. His Worship then called upon Lieut.-General PITT-RIVERS, F.R.S., F.S.A., the President of the Meeting, to deliver his opening address. This address is printed at p. 311. Professor E. C. CLARK proposed a hearty vote of thanks to General Pitt-Rivers for his address. The Institute had to thank him, not merely for his admirable paper, but also for his invaluable and continuous services to archaeology, of which he might be considered as the head in England. A valuable step would have been taken towards the preservation of relics of antiquity if proprietors of land, acting on the hint of General Pitt-Rivers, absolutely prohibited any unscientific investigation and insisted upon scrupulous care in excavation and record.

Professor BOYD DAWKINS, in seconding the vote of thanks, said he wished to acknowledge the great debt of gratitude all workers owed to General Pitt-Rivers. He was the first man to introduce method, accuracy, and precision into such enquiries, and the result of his work, he was sorry to say, had not yet been fully grasped by the public. He ventured to think that the work which he had carried out with pick-axe and shovel, and which was recorded in those magnificent volumes of his, had done more for the ancient history of the district than everything that had been written and done before. He took it that the future historian of that district would feel under a greater debt to his writings than to all the mere surface details which had been published before. Many years ago, more than he cared to think of, he obtained his schooling in the method of working out earthworks, the use of the level, the contour, and so forth, from General Pitt-Rivers; and his example, and not merely his results, would leave a profound mark on British archaeology. The General carried his method of precise investigation into Egypt, and was the first man to trace home early flint implements in Egypt to their original parent rock. The rock-hewn tombs at Thebes yielded him full proof that before Egyptian civilisation there were rude people roaming through the valley of the Nile, and using these flint implements. Until General Pitt-Rivers' researches came to the front there

was no well-authenticated instance of a camp of the Bronze Age, now there were four, of peculiar character and curious square type. It was by no means impossible that the irregular square camp on Hod Hill might have been one of the Bronze Age fortresses, afterwards remodelled and occupied by the Romans. He could only give a faint and inadequate outline of the labours of General Pitt-Rivers, but it was a great pleasure to him, as a working archaeologist, to meet the General on that platform.

Mr. RALLS, of Bridport, said that as a Dorset tradesman interested in archaeology, and one having received great kindness from General Pitt-Rivers, he desired to support the vote of thanks. He trusted that the spread of interest in archaeology would lead to the formation of small museums in connection with schools and be a help in technical education.

General PITT-RIVERS, in acknowledging the vote of thanks, said he was glad to see that in Dorchester so many people were beginning to take an interest in archaeological matters, as in these days little could be done without the support of the great masses of the population.

Sir HENRY HOWORTH, M.P., moved, and Judge BAYLIS, Q.C., seconded, a vote of thanks to the Mayor for presiding.

HIS WORSHIP briefly returned thanks. In a smaller room in the Town Hall the Mayor and Corporation had kindly displayed the civic insignia and numerous charters and books belonging to the town.

After luncheon the members assembled in the Roman amphitheatre or Maumbury Rings, Mr. H. J. MOULE, M.A., the well-known Curator of the Dorchester Museum, being in charge. Mr. Moule described the amphitheatre, the area of which is oval measuring about 210 feet by 150 feet, and is not much inferior to that of the Colosseum at Rome. The site of the Roman walls of the ancient *Durnovaria* was then traversed, Mr. Moule pointing out the houses which had been built on the counterescarp of the fosse. Only one small fragment of the wall remains above the surface. Near the end of the South Walk is the church of Fordington St. George, which was described by Mr. Moule. The church has been much mangled but has several points of interest, the most important being the Norman sculpture over the south door which presents a most vigorous representation of the interposition of St. George at the siege of Antioch on behalf of the Crusaders. The costume bears a striking resemblance to that of the Bayeux tapestry. There is an Elizabethan stone pulpit bearing date 1592, a large detached holy water stoup, a good Perpendicular font, and some unusual patterned encaustic tiles.

The Church of St. Peter, in the centre of the town, was next visited, Mr. Moule pointing out its principal features. The tower is a good, though not over rich, example of the elaborate west country towers of the fifteenth century, and the main features of the building are Perpendicular throughout. Under the south porch is a doorway of fine Norman Transition mouldings, which has evidently been rebuilt. The oldest monuments are two cross-legged effigies, now placed on the window-sills of the south chapel of the chancel. They probably represent members of the Chideock family, and were moved

here at the destruction of the adjacent church pertaining to a Franciscan friary. An arched recess on the north side of the altar is probably a founder's tomb made use of from time to time as the Easter sepulchre. In 1857 the church was "restored," but the process involved a general shifting of monuments and taking up of gravestones. The brass of Joan de St. Omer, 1436, disappeared, and the monuments of Sir John Williams, of Herringstone, and his wife, 1618, a most elaborate heraldic construction, and of Denzil Holles, who represented Dorchester in Parliament for so many years, and was made Lord Ifield at the restoration, were moved into dark corners. The latter was mutilated in order to crowd it into its present position.

From St. Peter's Church the party proceeded to the museum where the Curator, Mr. H. J. Moule, pointed out and described the admirable series of Dorset antiquities and fossils.

In the evening Professor BOYD DAWKINS, M.A., F.R.S., F.S.A., opened the Antiquarian Section with an address on "The Present Phase of Prehistoric Archaeology." This paper is printed at p. 377.

Wednesday, August 4th.

At 10.30 a.m. the members proceeded by train to Wareham, where they were met by the Rector—the Rev. S. Blackett, M.A.—who had kindly consented to act as guide to the town and its antiquities. The disused church of St. Martin was first visited, Mr. Blackett describing it as the relic of a Saxon church originally consisting of a nave and chancel, the north aisle having been added at a later date. Mr. J. T. MICKLETHWAITE, F.S.A., said he quite accepted it as a Saxon church. It was hard to date Saxon work, but one of the criteria of late date was approximation to Norman detail, such as might be observed here in the chancel arch, the abacus of which has a section which is common in Norman work. He was of the impression that the church belonged to the first half or middle of the eleventh century, and drew attention to the fragment of the hood of the characteristically tall Saxon door.

A considerable tract of the walls or ramparts of the town was then traversed, and at several points interesting and animated discussions occurred in which Mr. Blackett, Sir Henry Howorth, Professor Boyd Dawkins, Mr. Moule, Mr. Cunningham, and others took part.

Sir HENRY HOWORTH said it seemed to him that the walls were designed to keep out no other enemy than the sea. They were much like the banks surrounding many Dutch towns. Mr. MOULE objected to this theory on the ground that the walls surrounded only three sides of the town, and that on the fourth side where the river flowed, and where the danger of the incursion of the sea was greatest, there was no wall. Professor BOYD DAWKINS also objected on the ground that the level inside the wall was much higher than outside, and it was impossible for the town to have been submerged even by the highest tide. He took the ramparts to be for the purpose of fortification, and they appeared to him to be pre-Roman. He should compare them with the irregular ramparts surrounding ancient Silchester, in which was found the comparatively modern Silchester

of the Roman time shrunk within the earthen rampart of the great centre of power in that part of the country before the Romans came. The Wareham ramparts, he was inclined to think, belonged to a time before the Romans came and were intended to protect a population non-Roman and pre-Roman. From its geographical position this place must have been inhabited more or less from those days to the present time, but if Roman pottery was not found there in considerable quantities he should be inclined to think it was not much used by the Romans. There were Roman roads there, but there were also traces of more ancient British trackways, one going due south and another running westward in an irregular line. He therefore felt inclined to classify Wareham with such places as Poundbury, ancient Silchester, and St. Albans. Mr. CUNNINGTON said he had no doubt that Wareham was a pastoral camp of the Durotriges like Poundbury. It was ridiculous to say it was Roman. Stoborough, however, was the seat of a large Roman population, and there were potteries there. After inspecting the site of the Norman castle on the south side of the town the party proceeded to the church of St. Mary, which was described by Mr. BLACKETT. Of the ancient church only the west and east end remain, the nave having been rebuilt about fifty years ago. The leaden font attracted much attention, as did also two effigies upon which Viscount DILLON made some remarks. King Edward's chapel was also inspected.

After luncheon the party drove to Corfe Castle which was fully described by the Rev. O. L. MAXSEL, M.A. The return journey was then made to Wareham, and thence by train to Dorchester.

In the evening Sir HENRY HOWORTH, K.C.I.E., D.C.L., M.P., F.R.S., F.S.A., opened the Historical Section with a paper on the "Old and New Methods of Writing History." This paper will be printed in a future number of the *Journal*.

Thursday, August 5th.

The members drove to Sherborne, leaving Dorchester at 9 a.m., and under the guidance of Mr. W. B. WILDMAN, M.A., inspected the ruins of the old castle in the morning, and the abbey church and buildings, the latter now used as the school, in the afternoon. The hospital of St. John and a Roman tessellated pavement preserved in the dairy of the castle, were also visited. In the evening, the members of the Dorset Natural History and Antiquarian Field Club, and the Dorset County Museum, gave a soirée to the members of the Institute in the Museum Buildings. During the evening, the Rev. W. M. BARNES read a paper on "Roman and Norman Dorchester," illustrated by lantern slides, and Mr. H. J. MOULE, one "On the Seventeenth Century History of Dorchester." The museum was open for inspection, and a number of microscopes were also shown.

Friday, August 6th.

At 11 a.m. the General Annual Meeting of the Members of the Institute was held in the large room of the hotel. The President, Viscount DILLON, P.S.A., in the chair. The minutes of the last annual meeting were read and adopted. The Chairman then called on the Hon. Secretary to read the report for the past year.

REPORT OF COUNCIL FOR 1896.

The report which the Council has the honour of presenting, is the fifty-fifth in the annals of the Royal Archaeological Institute, and one which, it is believed, will be satisfactory to the members. The cash account shows an income in excess of the expenditure; one item only invites any particular comment. It appears on the income side, viz.: "Special Donations" amounting to £70 12s. This sum and one donation of £10 credited in the account for last year (together £80 12s.) are contributed by the Council and three other members, twenty-four in all, to cover the fraudulent defalcation adverted to in the report of last year. The cash balance on the credit side, viz.: £163 3s. 8d. compares favourably with the financial position of past years. There are no outstanding liabilities appertaining to the year 1896. The arrears of subscriptions are very small owing to the assiduity of the Honorary Secretary; on this point the Council ventures to express a hope that members will arrange to make their payments early in the year, so that the Council may foresee the means for liquidating the fixed charges and providing for the cost of the *Journal*.

The number of members shows a slight increase, twenty-one new members having been elected in 1896. The death roll for the year is, however, large, the loss amounting to twelve, and in addition seven members have resigned. Amongst our losses by death may be mentioned Mr. Justice Pinhey, a member of Council and a regular attendant at our Annual Meetings. Mr. Pinhey joined the Institute in the year 1882, and died at his residence at Eastbourne after a short illness in August last. Another familiar face will also be missed, viz., the Rev. W. F. Greeny, who, although not a member, was a constant and welcome guest at the Annual Meetings. He was with us at Canterbury last year, and joined in the excursion to Boulogne. His books on the Monumental Brasses and Incised Slabs of the Continent of Europe are the standard works on the subject. He died at Norwich on Easter Sunday last.

The Council has also to advert with special regret to the loss that archæology has sustained by the recent death of Sir A. Wollaston Franks, K.C.B., President of the Society of Antiquaries and a very old member and true friend to the Institute. Sir A. Wollaston Franks was elected a member of the Institute in the year 1848, and his first contribution to our proceedings appears in the *Journal* for that year, while numerous exhibitions and papers may be found in nearly all the succeeding volumes.

The Members of the Council retiring are: Messrs. E. Green, H. Jones, E. C. Hulme, H. Hutchings, Chancellor Ferguson, and H. Richards. It is proposed that Alderman Sir Stuart Knill, Bart., be elected an Honorary Vice-President, and that Chancellor Ferguson and Mr. G. E. Fox be elected Vice-Presidents, and that Messrs. E. Green, H. Jones, E. C. Hulme, H. Hutchings, H. Richards, Prof. E. C. Clark, and Prof. Flinders Petrie be re-elected and that Messrs. Talfourd Ely and E. W. Brabrook be added to the Council. It is further proposed that Mr. W. Pearce be elected auditor for the ensuing year in the place of Mr. Talfourd Ely.

On the motion of the PRESIDENT, seconded by Alderman Sir STUART KNILL, the report was adopted.

The HON. SECRETARY then read the balance-sheet (printed at p. 415), which was also adopted.

Several new members were elected. The President then read a letter from the Town Clerk of Lancaster, inviting the Institute, in the name of the Mayor and Corporation, to visit that town in 1898. Chancellor FERGUSON warmly supported the invitation, which was unanimously accepted.

In the afternoon the members drove to the camp at Poundbury, a short distance to the west of the town. The ramparts enclose an irregular oblong about 400 feet from north to south, and 1,000 feet from east to west. In the unavoidable absence of Professor Boyd Dawkins, Mr. E. GREEN, the Director of the Institute, gave an interesting description of this earthwork, and was followed by Messrs. Moule and Cunningham. The general opinion was in favour of the camp being late Celtic and held for a time by the Romans before the erection of the neighbouring walls of Dorchester. Mr. Moule pointed out a grassy ledge on the north side and level with the area of the camp which he claimed as a Celtic trackway.

From Poundbury the party proceeded to Maiden Castle where Mr. Green again acted as guide and read some notes prepared by Professor Dawkins. Maiden Castle covers over 120 acres with three tiers of ramparts on the north and five on the south. The entrances at the east and west ends are covered by a most ingenious arrangement of overlapping lengths of rampart, so that ingress and egress is only possible by a most circuitous route. Mr. Cunningham claimed the work as Roman, but his views met with no support. After making a complete circuit of the ramparts, the party descended to the carriages and returned to Dorchester. In the evening the Architectural Section was opened by the Rev. J. C. Cox, LL.D., F.S.A., with an address on "The Treatment of the Cathedral Churches of England during the Victorian Age." This address is printed at p. 239. A paper by the Rev. Canon RAVEN, D.D., F.S.A., on "The Church Bells of Dorsetshire," was, owing to the lateness of the hour, taken as read. It is printed at p. 355.

Saturday, August 7th.

At 10 a.m. the members proceeded in breaks to Abbotsbury where the church, remains of the abbey buildings, and the great barn were visited under the guidance of the Rev. B. NEVILLE. The church is mainly of the Perpendicular period with an eighteenth century classic reredos, and an heraldic plaster-work ceiling in the chancel. There is a good and elaborately carved Jacobean pulpit. The remains of the abbey buildings are very scanty, parts of the foundations of the church have been opened, and some of the buildings have been converted into stables and workshops. The great barn, when complete, was a splendid structure and the largest of its kind in England. When perfect it was about 300 feet long and had twenty-four bays. One half is now in use, and the rest in ruins. It is of the first half of the fourteenth century.

After luncheon the Chapel of St. Katherine, on the high ground overlooking the Chesil Bank, was visited, Mr. MICKLETHWAITE drawing attention to its special construction. It is a fifteenth century building, 45 feet by 15 feet, and built after a massive fashion, with a stone roof, so as to be almost storm proof, notwithstanding its exposed situation. Professor BOYD DAWKINS gave some account of the formation of the Chesil Bank, and also stated his views on the great earthwork of Maiden Castle. As to the latter, he expressly stated that its Roman construction was a simple impossibility, and that he believed it to be the most striking example of a hill-top type of fort constructed in the late Celtic or Iron Age.

The return journey to Dorchester was made by way of Hardy's monument and over Blackdown.

Monday, August 9th.

At 10 a.m. the carriages started for Wolfeton House, where the members were most courteously received by the owner—Mr. Albert Bankes—who pointed out all the most interesting features and gave a brief historical account of the house and its owners. Of the house, built by Sir Thomas Trenchard towards the close of the fifteenth century, much of the original and handsome domestic work remains, notably the gateway, which is flanked by large circular towers with conical roofs. The drawing-rooms have good plaster ceilings covered with an arabesque pattern and well-carved massive chimney-pieces. The quartered arms of Trenchard and Jurdain are repeated in many places. The house abounds in historical incidents and legends. The most remarkable of these, well told by Mr. Bankes, was the visit of Philip, Archduke of Austria and King of Castile, early in the sixteenth century. He was on his way with a fleet from Flanders to Spain, but was driven into Weymouth by a storm. Sir Thomas Trenchard, then High Sheriff, invited the King and his Queen to Wolfeton House. His young cousin John Russell, of Kingston Russell, was sent for as a good linguist to act as interpreter. The young man became a favourite with the King, who recommended him to Henry VII. He commended himself to Henry VII and Henry VIII. The latter gave him a large share of the property robbed from the monasteries, with the result that John Russell, a small country gentleman, became Earl of Bedford, and immediate founder of the Duke of Bedford's family. George III, when at Weymouth, was a frequent visitor to this house.

From Wolfeton the party walked through the grounds to Charminster Church, Mr. Bankes still acting as guide. The church has been quite recently restored. It has a fine late Perpendicular tower, built by Sir Thomas Trenchard. At the east end of the south aisle are two small canopied altar-tombs of Parbeck marble to the Trenchard family, but both robbed of their brasses. There are considerable remains of Norman and Transitional work, and a good many fragments of wall painting, including a peculiarly effective pineapple pattern. Over the chancel arch are remains of successive layers of paintings, the lower figure subject being the harrowing of hell. Before proceeding to the carriages, the President thanked

Mr. and Mrs. Bankes for their kind reception of the Institute, and Mr. Bankes for his interesting description of the house and church. From Charnminster the party proceeded to Cerne and under the guidance of Mr. MOULE visited the great abbey barn. This barn, of fourteenth century date, is a fine piece of building of freestone and squared flints. It consists of nine bays and is about 112 feet in length; probably there were five more bays at the north end when it was complete. The original roof has unfortunately perished.

After luncheon the party inspected the parish church, the vicar, the Rev. H. D. GUNDRY, M.A., giving a short description of its history. The building is mostly of the late Perpendicular period with a handsome ornamental tower, and contains a stone screen, a fine wooden pulpit dated 1640, and some good heraldic glass in the east window.

The remains of the abbey were next visited and described by Mr. MICKLETHWAITE. The chief remnant is a three-storied tower erected by Abbot Thomas in 1509. It is usually spoken of as the gate-house, but was really only the porch or entrance gateway into the abbot's buildings.

Most of the party then climbed the steep hill to the south of the abbey to inspect the famous giant of Cerne, a great nude club-armed figure cut in deep outline on the chalk. Mr. E. GREEN gave a short account of the figure, and Mr. MOULE narrated some of the local folk-lore connected with it, but neither ventured to assign any date to it. Professor BOYD DAWKINS observed that he was in ignorance as to its date. It was, however, in the midst of what was in the Bronze and prehistoric Iron Age a centre of dense population. On the hills above were hut circles, early settlements, camps and tumuli, showing that once there was a large population scattered over these downs. Nine out of ten of the tumuli which had been opened belonged to the Bronze Age. By its surroundings the figure was in a position which would make one pause before assigning it to any particular modern time. Figures of this class were not altogether unknown in sculptures belonging to the Bronze Age, and which had been found in Scandinavia ranging down to the early Iron Age. He thought it was by no means improbable that this figure might really belong to that remote period. The Professor added some interesting observations on the habitations on the chalk downs in olden days when the low land was either forest or morass.

On the return journey a halt was made at Wrackelford House, where Mr. and Mrs. Alfred Pope kindly entertained the members to afternoon tea. The President, on behalf of the Institute, expressed his warm appreciation of the kind hospitality extended to the members by Mr. and Mrs. Pope.

At the evening meeting the Rev. Sir TALBOT BAKER, M.A., V.P., read an interesting paper on "The House of the Vestals in the Forum at Rome, and the discovery of Anglo-Saxon coins in the excavation thereof."

The Rev. A. D. HILL reported the discovery of a Saxon church at Breamore, Hants. Positive proof of its Anglo-Saxon origin has become apparent on stripping off the plaster. The entire shell, 97 feet by 20 feet, is pre-Norman. A mutilated large rood, the three figures raised in relief in stonework, has been brought to light over

the entrance under the south porch, several small windows in the nave, and other details; but by far the most valuable discovery is that of an inscription over the narrow archway leading into the south transept or attached chamber. This inscription is cut in the stone, and was found filled up with plaster and coloured red. There was also a red line above and below the letters. The inscription is probably of the early part of the eleventh century. Mr. Hill considered the best translation to be "Here becomes manifest the covenant to thee," and that the inscription denoted the fulfilment of some church-building vow.

The general concluding meeting followed, the PRESIDENT, Viscount DILLON, in the Chair.

Professor BOYD DAWKINS suggested the advisability of excavation at Maiden Castle, saying he should be exceedingly glad if, instead of having theories, the pick and shovel could be applied. He would be glad to co-operate in such work.

After some discussion the following resolution, moved by the PRESIDENT, and seconded by the Rev. Dr. COX, was unanimously carried, viz. "That this meeting of the Royal Archaeological Institute heartily approves of the proposition made by Professor Boyd Dawkins for the systematic investigation of Maiden Castle, believing that such work, carefully undertaken under his direction, will be of the first importance towards the elucidation of early history."

On the motion of the PRESIDENT, hearty and unanimous votes of thanks were accorded to General Pitt-Rivers, President of the Meeting, and to His Worship the Mayor, for his courteous reception of the Institute.

The DEAN OF WELLS proposed a vote of thanks to the Presidents of Sections. This was seconded by the ARCHDEACON OF DERBY and duly carried.

JUDGE BAYLIS proposed a vote of thanks to the Dorset Field Club, and to the County Museum Committee. This was seconded by Mr. W. PEARCE, and carried unanimously.

Professor E. C. CLARK then moved a vote of thanks to the Local Committee and the Hon. Local Secretary. Mr. CATES seconded and the vote was carried with acclamation. Mr. MOULE, the Hon. Local Secretary, responded.

Votes of thanks were also passed to the owners of houses visited, and to the clergy who had allowed the Institute to visit and inspect the churches.

The PRESIDENT proposed a vote of thanks to the Director and Meeting Secretary, and the Rev. Sir TALBOT BAKER, one to the President for presiding at the meeting.

Tuesday, August 10th.

At 10 a.m. the carriages started for Piddletown, where the interesting and unrestored church was fully described by Mr. E. DORAN WEBB, F.S.A., and the fine series of monuments of the Martin family by Lord DILLON. From Piddletown the party proceeded to Athelhampton Hall, one of the best specimens of Tudor domestic architecture in the county and long the seat of the Martin family.

Mr. H. J. MOULE gave a brief sketch of its history and architectural details. The drive was then resumed to Milton Abbey, where, after luncheon, Mr. WEBB described the Abbey Church, and drew particular attention to the elaborate four-story tabernacle of fifteenth century work which is fixed high up against the west wall of the transept.

From Milton a pleasant drive brought the party to the interesting manor house of Bingham's Melcombe, where the members were hospitably received by Mr. and Mrs. Bosworth Smith. Mr. MOULE pointed out the chief objects of interest, and gave a brief history of the house. The President having thanked Mr. and Mrs. Bosworth Smith for their kind hospitality, the return journey was commenced and Dorchester reached at 6 p.m.

VISIT TO JERSEY.

Wednesday, August 11th.

About thirty members of the Institute left Weymouth for Jersey, having accepted the invitation of the Société Jersiaise to spend two days on the island. On arriving at St. Helier's they were met by Mr. G. Le Gros and Mr. W. Nicolle who welcomed them in the name of the Société. From the pier the party proceeded to the Hotel de l'Europe where accommodation had been prepared and arrangements made for its reception.

Thursday, August 12th.

At 9 a.m. the President of the Société Jersiaise, Colonel Le Cornu, C.B., F.S.A., received the members in the museum of the Société, and, after a few words of welcome, displayed and described the chief objects of interest.

At 10 a.m. the carriages started for the Ville Nouaux to inspect the prehistoric remains found near the Martello Tower. Colonel Le Cornu gave a short account of the cromlech and of its excavation. Proceeding through St Peter's Valley, a halt was made at Grève de Lecq where luncheon was most hospitably provided by the Société. After luncheon the journey was resumed to Grosnez Castle, visiting on the way a fine example of local domestic architecture now converted into a farm-house. The remarkable and recently excavated foundations at Grosnez were fully described by Colonel Le Cornu and Mr. W. Nicolle. Much interesting argument ensued, but little of its history seems to be known. After leaving Grosnez a halt was made at the church of St. Ouen for a brief inspection, and the Manor House was also visited, under the guidance of the Seigneur Colonel Malet de Carteret. Thence to St. Peter's church and La Hague Manor where Colonel Le Cornu most kindly entertained the party to tea. From La Hague the drive was continued to St. Brelade's where an inspection of the church and the Fishermen's chapel was made. At 7 p.m. the party assembled at the St. Brelade's Bay Hotel where the members of the Institute were entertained to dinner by the Société Jersiaise. Colonel Le Cornu in the chair. The

usual toasts were proposed and duly honoured. Leaving St. Brelade's a delightful drive by moonlight along St. Aubin's Bay brought the party to St. Helier's.

Friday, August 13th.

Starting at 10 a.m. the carriages first halted at St. Saviour's church which was described by the rector. Thence to Les Casteaux, a conjectured Roman station upon which Mr. W. Nicolle read a paper. Then to Le Haut Mau, a vast earthwork cutting off the promontory of Rozel. Much discussion ensued as to its origin and date, but no satisfactory conclusion was arrived at. The Manor House at Rozel, with its interesting chapel and beautiful grounds, was kindly thrown open and described by the Seigneur, Mr. Lem-prière. Then to Gorez where luncheon was again most kindly provided by the Société. After luncheon the castle of Mont Orgueil was leisurely visited and thoroughly described by Colonel Le Cornu. Proceeding up the hill the fine cromlech at Faldouet was next visited. The cromlech is now the property of the Société under whose care every protection is afforded to this remarkable and interesting relic. The next point was La Hougue-bye, a high conical mound surmounted by a medieval chapel now converted into a summer house. Little or nothing could be determined as to the origin of the mound. The journey was then resumed and St. Helier's reached about 7 p.m. In the evening some of the members of the Société Jersiaise were entertained to dinner by the members of the Institute, and a pleasant evening was spent.

Saturday, August 14th.

The Members of the Institute returned home by the boat leaving St. Helier's at 8.30 a.m.

The Institute is indebted to the Société Jersiaise, not only for planning the above most enjoyable excursions but also for the carriages and for much hospitality during the visit, leaving altogether an impression of pleasure and instruction which it will be hardly possible to remove or forget.

Ordinary Meetings.

November 3rd, 1897.

JUDGE BAYLIS, Q.C., V.P., in the Chair.

Mr. F. G. HILTON PRICE, Dir. S.A., exhibited seven burgesses' caps or flat-caps of the sixteenth century, upon which he read the following notes:—

These caps, of which I now exhibit seven examples were found in Finsbury within the last few years, they are of the ordinary shapes

which were in general use among the middle classes during the reigns of Henry VIII, Edward VI, Mary and Elizabeth. During this period they were known to Londoners as the "City Flat-cap," also the "Statute-cap" of Shakespeare.

Upon reference to "Costume in England," by the late F. W. Fairholt, enlarged and revised by our excellent President Lord Dillon¹, I find that they were so-called because they were strictly enjoined to be worn, by the 13th of Elizabeth, Cap. 19, for the encouragement of the home manufacture: the law being, that "if any person above six years of age (except maidens, ladies, gentlewomen, nobles, knights, gentlemen of twenty marks by year in lands, and their heirs, and such as have borne office of worship) have not worn upon the Sunday and holyday (except it be in the time of his travell out of the city, town, or hamlet, where he dwelleth) upon his head one cap of wool, knit, thicked, and dressed in England, and only dressed and finished by some of the trade of cappers, shall be fined 3s. 4d. for each day's transgression."

There appears to have been even in those days a great dislike to things being "made in Germany," therefore this law was enforced for the encouragement of home trade, but the law did not appear to be wholly agreeable as we find on reference to the same work that the people as constantly as they were enacted, either evaded or openly violated it. The law was repealed in 1597. The folks to whom the law applied were chiefly citizens, artificers and labourers. Yet when we look at portraits of Edward VI, we see that he is usually depicted wearing one of these caps, and many other portraits of men of that particular period wore them, such as Sir Thomas Gresham and others, it is also the prescribed head-gear of the Blue-coat boys, who wear the dress of citizens of the time of Edward VI, but for some reason or another, these boys are never seen wearing their caps, in consequence it has been stated that they have been "cropped of their fair proportions."

Thomas Dekker, the dramatist, in his *Knights' Conjuring*, 1607, a satire on the times, speaks of a person "at howling alleys in a flat-cap, like a shop keeper." And again Dekker in his *Honest Whore*², second part, 1630, highly praises them in the following lines:

"It's light for summer, and in cold it sits,
Close to the scull, a warm house for the wits;
It shows the whole face boldly, 'tis not made
As if a man to look on't were afraid:
Nor like a draper's shop with broad dark shed,
For he's no citizen that hides his head.
Flat-caps as proper are to city gowns,
As to armour helmets, or to Kings their crowns."

One of the caps now before you is furnished with large ear-flaps and another is ornamented with silk ribbons.

Mr. J. PARK HARRISON, M.A., read a paper on the "Carfax Tower, Oxford." Mr. Harrison said that the results of recent research showed that two rude arches and a doorway high up in the north wall inside the ringers' chamber are, without doubt, of early Saxon date.

This, it is to be hoped, when known will lead to their preservation intact on account of the interest they possess in connection with the history of the city. The Oxford Council and the eminent architect and antiquary employed by them would, it cannot be doubted, have taken measures to do so had it been known that the remains were of earlier date than Canute. Anthony Wood, in his *City of Oxford*, says that the earliest mention he could find of St. Martin's Church was in a charter by which Canute gave a church dedicated to St. Martin to Abingdon Abbey, *circa* 1035, adding that this was some time after he became possessed of it, and also that it was believed in his time to have been built by Eadward the Elder. Mr. Fletcher, too, the last vicar previous to the union of the parish of St. Martin and the adjoining parish of All Saints, and the consequent demolition of Carfax Church to widen the highway, points out in his history of the former parish that Canute's charter "was not the foundation of a church," and that it was not known when St. Martin's Church was built. History, then, merely contributing the bare fact that a church dedicated to St. Martin was given to Abingdon Abbey by Canute, it rests with archaeology to ascertain whether any distinctive architecture inside the tower is of a Saxon type, and this can be shown to be so. The evidence is too technical for an abridged report, and would require photographs to illustrate it. It may be stated, however, that the remains exhibit peculiar structural features common to Roman and Saxon architecture, which Mr. Micklethwaite, our principal authority on Saxon ecclesiology, informs us continued in use to the end of the Saxon period. It may be styled a wall-impost, the object of which was to support framed centring for turning arches. The earliest examples of this structural feature are to be found at the east end of Oxford Cathedral, and are believed to date from the first half of the eighth century. They are in a wall which Ethelred II appears to have religiously preserved when, as we learn from his charter of 1002, he restored and enlarged the church founded by St. Frideswide and her father. There are also two other examples in Oxford, Canute's "famous city." They may be of ninth century date. In all four cases the space of the arches is more than the width of the doorway below. The exterior of Carfax Tower was shown, if it were stripped of later work, namely, Early English, Decorated, and modern, to have been of true Saxon proportions, and the walls, as usual in the style, only 3 feet 6 inches thick.

Mr. F. G. HILTON PRICE, Dir.S.A., read a paper on the "Remains of Carmelite Buildings upon the site of the Marygold at Temple Bar." Mr. Price stated that in 1878-79 extensive excavations were made at Temple Bar for the purpose of building the new bank of Messrs. Child and Co. During these excavations a square cellar was found which seemed to have the appearance of a crypt of an ancient building, a portion having a pointed roof which was supported by several large stone pillars. Three feet below the floor of this cellar was found a layer of encaustic tiles, having a green and yellow glaze, and, in another part, a large quantity of human bones arranged in five regular rows, lying north-east and south-west. A copper cauldron of early date was also discovered. No documentary history was known to exist by which these early foundations could be identified with any building, until this year, when Mr. W. F. Noble

came across some old documents in the Record Office relating to the history of the site of the Marygold. A Recovery Roll for Easter term in the seventh year of James I, describes the tenement called The Marygold as once "parcel of the possessions of the late dissolved Priory of Carmelite Fryers in the suburbs of the City of London," founded in 1241. From this and other documents Mr. Noble was able to trace the continued ownership of The Marygold from 1241 to the present day, a period of 656 years. From the evidence thus brought forward, Mr. Price considered it proven that the Carmelite priory stood on the site of No. 1, Fleet Street.

December 1st, 1897.

CHANCELLOR FERGUSON, F.S.A., V.P., in the Chair.

Mr. C. EDWARDS exhibited twelve Romano-British pewter vessels, part of a deposit of thirty-three objects found this autumn at Apple-shaw, near Andover, by the Rev. G. H. Engleheart. The vessels exhibited consisted of three round dishes each about 15 inches in diameter and ornamented in the centre with geometrical patterns, several cup-shaped vessels resembling well-known types of Samian pottery, a small dish in the shape of a fish, and a shallow circular bowl with the Chi-rho on the base. The whole find has since been acquired by the British Museum.

J. WICKHAM LEGG, M.D., F.S.A., read a paper on the "Eastern Omophorion and the Western Pallium." Dr. Legg said that many years ago Commendatore C. B. de Rossi had pointed out to him that the modern vestments of a Greek bishop correspond to those of an emperor or consul: the *stoicharion* and *saccos* to the two undergarments shown in a consular diptych, and the omophorion to the consular scarf. The *epigonation*, not seen in the diptych, Dr. Legg referred to the lozenge-shaped ornament seen on the dress of the emperor and his courtiers in the mosaics at Ravenna. With the aid of illustrations from mosaics and pictures the relation between the two forms of omophorion and pall—the one broad and silken, and the other narrow and woollen—was discussed, and numerous points of resemblance in detail pointed out. The pall in the East was the distinctive episcopal ornament, much as the stole is considered the distinctive presbyteral ornament in the West. According to Abbé Duchesne, the pall was formerly worn by all bishops in the West, at all events in the Gallican countries. Here it was noticed, however, that we left the safe ground of the monuments, and began to deal with the uncertain information given by writers who attributed various meanings to the same word, and the difficulties of the antiquary in unravelling the tangle were not diminished by the controversies which had raged round the symbolism of the pall.

In illustration of Dr. Legg's paper numerous photographs and casts of consular diptychs were exhibited.

Mr. H. SWAINSON COWPER, F.S.A., contributed a paper on "A Bloomery or Iron Smelting Furnace on Coniston Lake," which in his unavoidable absence was read by the Honorary Secretary, Mr. Cowper's paper will be printed in a future number of the *Journal*.

The Royal Archaeological Institute of Great Britain and Ireland.

CASH ACCOUNT FOR THE YEAR ENDED 31st DECEMBER, 1896.

Dr.

INCOME.

	£	s.	d.
To Cash Balances as per last Account	...	...	63 18 7
" Subscriptions—			
252 Annual Subscriptions at £1 1s.	...	275 2 0	
3 Associate " at 16s. 6d.	...	1 11 6	
253 Together received during year	...	276 13 6	
1 Subscription paid in advance in the year 1893	...		
1 " " " 1894	...		
3 " " " 1895	...		
8 " " in arrear at 31st December, 1896	...		
275 Total annual subscriptions at 31st December, 1896.	...		
Arrears as under paid in 1896—	£	s.	d.
For the year 1894, 2 at £1 1s.	...	2 0 0	
" " 1895, 11 at £1 1s.	...	11 11 0	
" Subscriptions paid in advance for the year 1897:—			
6 Subscriptions at £1 1s.	...	6 6 0	
Entrance Fees	...	296 12 6	
" Sale of Publications, &c.	...	10 10 0	
" Balance of Canterbury Meeting	...	43 16 6	
" Special Donations	...	22 1 0	
" Donation	...	70 12 0	
" Special Donation for Engraving, Professor Bunsell	...	2 2 0	
Lewis, M.A., F.S.A.	...	2 0 0	
		74 14 0	
		<u>£511 12 7</u>	

We hereby certify that we have prepared the above Cash Account for the year ended 31st December, 1896, and that the same agrees with the Cash and Bankers' Pass Books of the Institute. Further, we have also examined the payments made during the period with the vouchers produced, and find the same in order.

H. MILLS BRANFORD & Co.,
Chartered Accountants,
3, Broad Street Buildings, E.C.,
London, 24th May, 1897.

Cr.

EXPENDITURE.

	£	s.	d.
By Publishing Account—			
Engraving, &c., for Journal	...	37 0 5	
Harrison and Sons, Printing and Delivery of Journal (including Vol. 53, up to Part 212) ...	...	238 7 4	
" House Expenses—			
Rent of Offices	...	40 0 0	
Lighting	...	5 0 0	
Printing Notices and Sundries	...	4 8 6	
" Petty Cash—			
Postage	...	6 18 1	
Engraving and Printing	...	2 18 4	
Carriage	...	0 2 6	
Porterage and sundries	...	3 8 5	
Stationery	...	3 16 5	
Insurances	...	0 15 0	
Robbery of Cash Box	...	5 13 11	
" Cash Balances—			
At Bankers	...	158 15 7	
In hand	...	4 8 1	
		<u>£511 12 7</u>	

Examined and found correct,

TALFOURD ELY, M.A., F.S.A.,
H. LONGDEN.

Honorary Auditors.

Notices of Archaeological Publications.

OLD ENGLISH GLASSES. AN ACCOUNT OF GLASS DRINKING VESSELS IN ENGLAND, FROM EARLY TIMES TO THE END OF THE EIGHTEENTH CENTURY. BY ALBERT HARTSHORNE, F.S.A. 13 inches by 10½ inches. pp. xxiii and 490. (London and New York: Edward Arnold. 1897.)

Mr. Albert Hartshorne has for many years had in hand a work on this picturesque subject, which has not hitherto been treated of. For his task he possesses many and unusual qualifications—firstly, an hereditary taste and aptitude, for his father, the late Mr. Hartshorne, and his father's friend, the late Mr. Albert Way, were among the earliest of modern antiquaries to recognise the merits of old English wine glasses, and made their collections in the halcyon times, more than half a century ago, when "rose glasses" could be picked up for a shilling or even sixpence apiece; secondly, a fine and comprehensive cabinet of glasses, partly inherited, but largely augmented by our author's finds both at home and abroad; and, thirdly, a manuscript collection of *Original Correspondence* 1633–1812 by members of the families of Rogerson, Postlethwayt, and Kerrick, filling twenty-eight large folio volumes, and furnishing our author with many apt allusions and explanations. Upon these materials Mr. Albert Hartshorne has brought to bear a thorough knowledge of art in all its branches; a wide acquaintance with the English literature of the seventeenth and eighteenth centuries; and much minute original research into the history, manufactory, and technicalities of glass and glasses. He has in fact done for old English glasses what Sir John Evans did for stone and bronze implements, and Mr. Cripps for silver; he has made his subject, and defined its grouping.

The book is laid out upon a comprehensive and logical plan: by way of introduction, our author devotes about a hundred pages to what he calls outlines or slight sketches of the history of glass making in Egypt, and in classic, Merovingian and mediæval times; Venetian glasses are also treated of, and the origin and progress of glass drinking vessels in the United Provinces are set forth for the first time in England, as the author claims. Next he deals with the rise, advance and decay of that remarkable art movement, the introduction into the Low Countries by Venetians and Altarists of glasses "*façon de Venise*." The lines of travel of the glasses of Western Germany, of Silesia, Bohemia, and South Germany are carefully traced, and the Igel, Roemer, Krautstrunk, Passglas, Wilkomm and all kinds of Humpen are illustrated: tempting as it is, we cannot delay to describe these drinking vessels, but by the kindness of the publisher, Mr. Edward Arnold, we are able to set before the readers of the *Journal* illustrations of some of them.

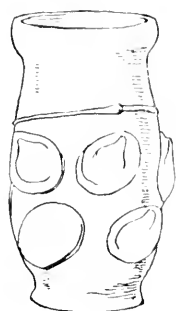


FIG. 60. (One-quarter.) IGEL.

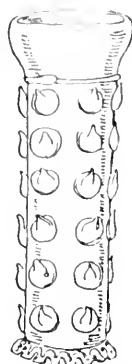
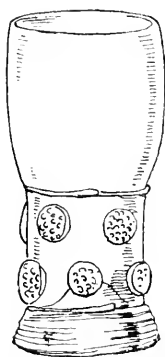
FIG. 61. (One-quarter.)
KRAUTSTRUNK.

FIG. 62. (One-quarter.) ROEMER.

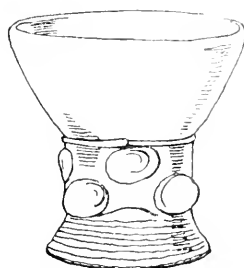


FIG. 63. (One-quarter.) BERKEMEYER.

The story of the Venetians and the Altarists and their dissemination over other countries than their own is a fascinating episode in the book, and may well claim to be called romantic. The Venetian government in the year 1454 made a decree whereby it was enacted that if any workman of any kind should transport his craft into a foreign country to the injury of the Republic, and should refuse to return home, an emissary should be commissioned to slay him—a thing which actually happened in the case of two workmen from Murano (an island in the Venetian archipelago), whom the Emperor Leopold had, two hundred and fifty years later, induced to settle in his dominions. With the knowledge of this decree in their minds, connoisseurs have been puzzled to account for the great prevalence in the Low Countries, in Germany, and in France of glasses “*façon de Venise*.” But Mr. Hartshorne has discovered that the small town of Altare in the commune of Liguria and province of Genoa had attracted in the eleventh century French and Flemish emigrant glass makers, who were allowed to settle there; and they thus came under

the influence of Italian Art on glass making. Now the authorities of Altare, unlike those of Venice, encouraged their workmen to go from home and actually farmed them out for terms of years to foreign states. so that, although a few Venetians doubtless managed to run the gantlet of the protective laws of their country, yet it was the Altarists who really carried the "*façon de Venise*" throughout the Low Countries, France and Northern Europe, there being little, if any, difference between the works of the Venetians and the Altarists. The relevancy to the main subject of this history of glass and glasses on the continent becomes apparent when the reader arrives at the part of the book which, in twenty-three chapters, deals with "*Old English Glasses*," and therefore with the history of glass making in England. We meet, by the way, in these introductory pages, with some charming personages in the artists, frequently ladies, such as the beautiful and accomplished Maria Visscher and her two sisters, and the learned Anna Maria van Schurman, who decorated Roemers and other glasses with the most exquisite diamond point engraving.

The earliest objects in glass, or speaking more strictly in vitreous paste, which have been found in Britain are the coloured or "*aggry*" beads, of which the bulk probably were imported from Phœnicia, but the wide distribution of certain types of beads, and the uncertainty as to their dates, makes it difficult to decide upon the country or countries of their fabrication. As our author remarks, "*The classification, and complete illustration of beads is desirable, but it would not be an easy task.*" We wish Mr. Hartshorne would undertake it. Coming to the Romans, the evidence as to their manufacturing glass in this country is not conclusive, though there is no reason why they should not have done so. But coming to the Anglo-Saxon period, circumstances of provenance and indirect historical evidence seem to point to glass-houses in the weald of Kent and Sussex as having produced many of the stringed and ribbed or fluted vessels of conical or trumpet shape, and also of the palm cups and hemispherical bowls,



FIG. 126. (One-third.)

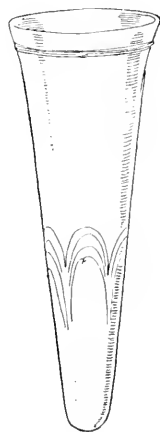


FIG. 127. (One-third.)

CONICAL OR TRUMPET SHAPED CUPS.

which have been found in Saxon graves. Stringed and lobed vases, much resembling those of the Merovingian period, would seem to be

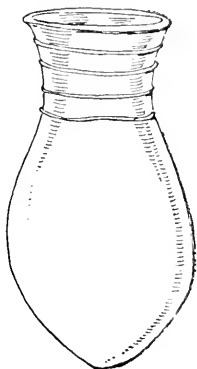


FIG. 130. (One-third.)



FIG. 131. (One-third.)

GLOBULAR OR HEMISPHERICAL BOWLS.

importations. These Anglo-Saxon glasses range in date from the sixth to the tenth century. From that time, from the Norman

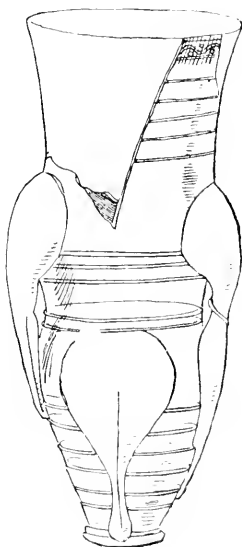


FIG. 124. (One-quarter.) STRINGED AND LOBED VASE.

invasion to the days of Queen Elizabeth, there is a gap in the history of glasses in England, easily perhaps to be accounted for. The wealthy used massive cups and vessels of gold and silver, gripes' eggs, nuts, and cups of agate and crystal, whilst the poor used vessels of wood—*treen*, of horn, and of leather. The use of the latter also among the upper classes in the shape of great black jacks and bombards, induced in France a long prevalent belief that the English drank out of their boots. Thus it came that, although glass was continuously made at Chiddingfold in the Weald between the years 1200 and 1600, drinking glasses were not as a rule made in England; Mr. Hartshorne, with all his industry, can only enumerate some half-dozen English-made glass drinking cups or vessels that can be dated between the end of Saxon times and the end of the sixteenth century. What they turned out at Chiddingfold is uncertain. Mr. Hartshorne shows reason to conclude that glass making—window glass making, blown and not cast glass—was introduced and practised in England from the middle of the twelfth to the beginning of the sixteenth century.

The renaissance in England of glass making was due to the establishment there in 1549 of eight glass makers from Murano, where there was not work for them. They were attracted to London by the offers of Edward VI, who probably established them in the hall of the Crutched Friars in London. The arm of the Venetian Republic was long enough to reach these men, and after a stay of two years and a half seven of them returned to Murano, leaving behind Josepo Casselavi, who stayed in London for twelve years in all, associated with one Thomaso Cavato from Antwerp. We now come to the era of the Elizabethan Monopoly Patents, such as that in copper established at Keswick; alum and copperas in the Isle of Wight; brass and iron wire at Tintern, etc. Several concessions were made to glass makers from the Low Countries, from Normandy, and from Lorraine, who established glass houses in Sussex and Surrey, and in Buckholt Wood in Hampshire, progressing on westward to Newent in the Forest of Dean, to Gloucester, to Stourbridge, and northward to Newcastle-on-Tyne, not without much grumbling on the part of native workmen, and also of those who viewed with apprehension the destruction of the forests under the demands of the glass workers for fuel. The principal patentee was Jacob Verzelini, who had a patent for twenty-one years, expiring in 1596. He worked in the Crutched Friars; apparently there was money in the business, for, after the expiration of his patent, we find patents or licences to make drinking glasses "*façon de Venise*" granted to Englishmen of position, to Sir Jerome Bower, Sir William Slingsby, Sir Edward Zouche, Sir Robert Mansel, and others, until in 1617 Vice-Admiral Sir Robert Mansel bought the others out and obtained sole control of the glass business in England. Space hinders us from going into the history of Mansel's speculations, his losses, and his ultimate success, but the chapter thereon well repays perusal. During his time a great and important change took place in the science of glass making. In 1615 a proclamation prohibited the use of wood as fuel in the glass furnaces. The glass workers had in consequence to move to the coal fields, and close or cover over their melting pots. Oxide of lead was also added

to the frit, with the view of increasing its fusibility, thus producing lead or flint glass, and resulting eventually in the manufacture in England of the most brilliant crystal glass ever produced in the world. Another change was that Englishmen became the masters, and foreigners mere artizans.

On Mansel's death, Philip Howard, a colonel in the Guards, petitioned for a grant of Mansel's concession. Mr. Hartshorne has been led by the late Mr. Henry Howard, of Corby, author of the *Memorials of the Howard Family*, into the error of thinking this Philip Howard to be a son of the Earl of Berkshire; he was a brother of the Earl of Carlisle, and held a patent for a varnish or composition for coating the bottoms of ships. Howard did not get a patent for glass making, though several were granted, including one to the Duke of Buckingham. Mr. Hartshorne engraves an undoubted and dated example of an English glass made in the Duke's glass-house near Greenwich. This is the Royal Oak glass, engraved in the diamond point fashion with the portraits of Charles II and his Queen, and the Royal Oak with the King's head in a medallion. This is almost a solitary example of English-made glass that can be safely assigned to the seventeenth century. But documentary evidence as to the shape, size, and form of Venetian glasses imported from Venice into London exists among the Sloane MSS., being the office copies of letters from John Greene, a London glass seller, and his partner, Michael Mesey, to Signor Allesio Morelli, glass maker at Venice, between the years 1667 and 1672. The letters, which are most amusing, are reproduced in the appendix and are accompanied by full-sized pen-and-ink sketches of the glasses required, to the number of 173 sketches. We thus have the trade patterns then in vogue in England. Some examples yet survive, both of the Venetian importations and of the English imitations, which last can be readily distinguished by their greater weight and superior brilliancy. Beginning with the year 1700, Mr. Hartshorne has no difficulty in finding examples, and arranging them in due sequence. He is most liberal with his illustrations, and this is the part of the book in which collectors will most revel. The space at our disposal hinders us from even enumerating the sixteen groups into which the eighteenth century glasses are divided, but we give in the illustrations herewith an example from each group, with a short title.

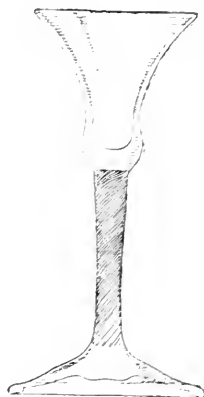


FIG. 176. (One-third.)
1. INCISED STEM.



FIG. 178. (One-third.)
2. AIR STEM.



FIG. 185. (One-third.)
3. DRAWN STEM.

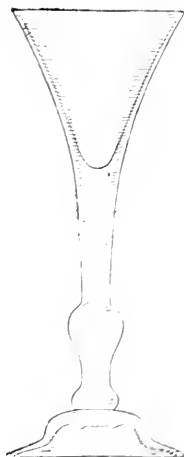


FIG. 189. (One-third.)
4. BALUSTER STEM.

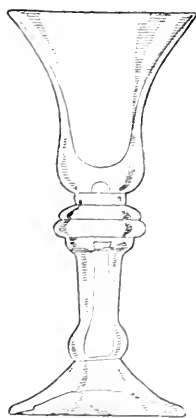


FIG. 196. (One-third.)
5. TAVERN OR HOUSEHOLD.

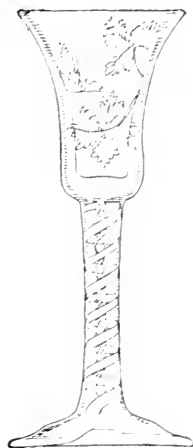


FIG. 210. (One-third.)
6. OPAQUE TWISTED
STEM.

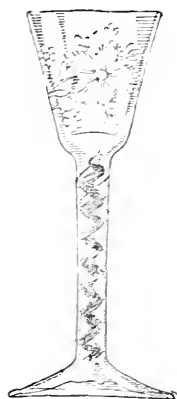


FIG. 221. (One-third.)
7. STRAIGHT-SIDED.



FIG. 232. (One-third.)
S. OGEE, ETC., SERIES.



FIG. 245. (One third.)
9. CUT AND ENGRAVED

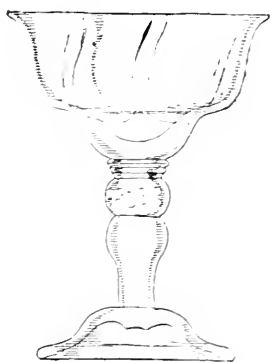


FIG. 254. (One-third.)
10. CHAMPAGNE, ETC.

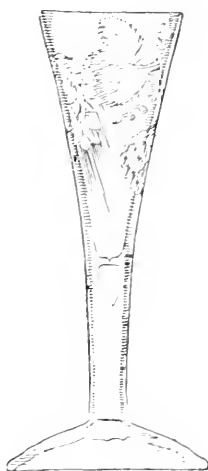


FIG. 273. (One-third.)
11. ALE, MEAD, ETC.

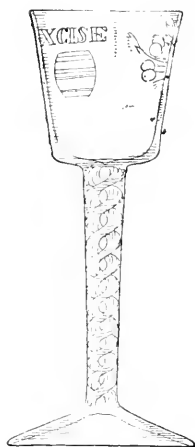


FIG. 288. (One-third.)
12. CIDER, PERRY.



FIG. 298. (One-third.)
13. STRONG AND CORDIAL
WATERS.

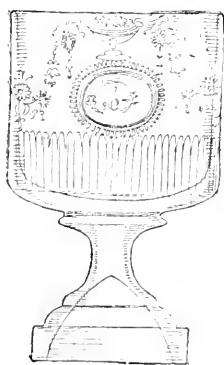


FIG. 326. (One-third.)
14. RUMMERS.



FIG. 335. (One-third.)
15. TUMBLERS, TANKARDS,
ETC.

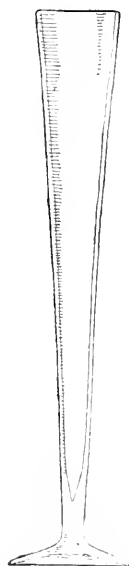


FIG. 344. (One-sixth.)
16. FLUTES, ETC.

A long and interesting chapter deals with Jacobite glasses, relics of the '15 and the '45, and of the Jacobite clubs that cherished the Stuart traditions, and drank to the King "over the water." A short

chapter deals with Irish glasses, of which those dedicated to the memory of William III are the most important. The concluding

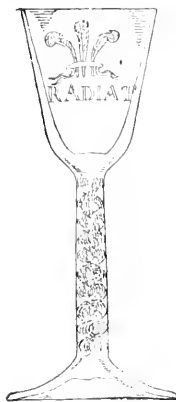


FIG. 356. (One-third.)

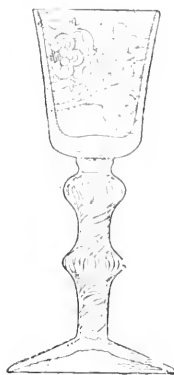


FIG. 357. (One-third.)

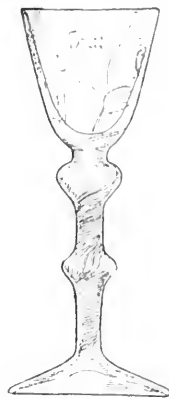


FIG. 358. (One-third.)

JACOBITE GLASSES.

chapter is the most curious in the book. It gives an account of wine in England from early times to the end of the eighteenth century, and is full to repletion of out-of-the-way information and learning; a vast amount indeed of such information and learning is contained in the more than 800 footnotes at the bottom of the pages throughout this volume.

The book itself, as a book, is well worthy of the royal patronage that has been graciously extended to it, the Queen having been pleased to accept its dedication to her; the printing clear and good, done in the finest style, in good black ink on good paper. There are sixty-seven full page tinted plates; for the outlines of about one-half the number the author is responsible, while 208 of the 366 blocks in the letterpress are reductions from his full-sized drawings; and the beautiful and appropriate binding is of his designing, the result being a real *édition de luxe*. There is a full and satisfactory index: a glossary might have been useful: we note that the full-sized Plates XXXI and XXXII should be transferred.

We have to thank the publisher, Mr. Edward Arnold, for the courteous and liberal loan of blocks.

THE GENTLEMAN'S MAGAZINE LIBRARY: being a classified collection of the chief contents of the *Gentleman's Magazine* from 1731 to 1868. Edited by GEORGE LAWRENCE GOMME, F.S.A. *English Topography. Part IX. Nottinghamshire—Oxfordshire—Rutlandshire.* Edited by F. A. MILNE, M.A. (Elliot Stock, 8vo, 1897.)

Here we have another volume of gathered and arranged details now relating to the above three counties, the last, however, better known as Rutland. The notices of Nottinghamshire are not very full, but of the many details the description of the municipal regalia of East Retford may be noted. Oxfordshire and Oxford city, as may

be expected, have fuller descriptions and fuller architectural details. Dorchester, its church and antiquities, have their share. Domestic architecture has also much of interest, and it is noted that portions of Chaucer's house remained in 1792. The building account of Thame church, 1442, occupies twelve pages. Forty-eight pages are occupied with notes on the city of Oxford; genuine notes, full of interest. Rutland, our smallest county, has its share of notice of considerable value, with much heraldic lore. These volumes are always welcomed, and must command the attention of all having feelings of attachment to their own locality. There are two indexes—one of names, the other of subjects—thus greatly facilitating reference.

CAPTAIN CUELLAR'S ADVENTURES IN CONNACHT AND ULSTER, A.D. 1588. A picture of the times drawn from contemporary sources. By HUGH ALLINGHAM, M.R.I.A., etc. To which is added an introduction and complete translation of Captain Cuellar's *Narrative of the Spanish Armada*, and his *Adventures in Ireland*. By ROBERT CRAWFORD, M.A., M.R.I.A., etc. With map and illustrations. (Elliot Stock, 8vo, Belfast, 1897.)

Mr. Allingham here returns to, or continues, a subject with which he is familiar, having already written notices of this great episode. It is now a criticism and notes on a letter written by a Spanish captain, who managed to survive and eventually to escape to Flanders, where this letter seems to have been written. Cuellar's ship, on the voyage from Spain, encountered an English ship off the coast of France, and sustained great damage from shot holes. In time his vessel was off the coast of Ireland with two others, where, encountering bad weather, they were all driven ashore and but few of the men escaped from drowning. Here the survivors were met by the "savages," as the writer calls them, ready for plunder. A good description is given of these "savages," their habits, food, and dress. The many adventures of the author are of interest, especially his defence of Rosselloghan Castle. Doubtful and even inaccurate statements there must be, as the letter or narrative was written from memory; but as a whole it bears the stamp of intentional truthfulness. The translation in full is added at the end, and a great consideration for readers is shown by the addition of an index.

PATRIARCHAL PALESTINE. By Rev. A. H. SAYCE. With map. (S.P.C.K., 8vo, 1895.)

The constant flow of discovery in Egypt seems to have been one reason for the issue of this volume. There is, however, much yet to be done before the subject will be treated in a masterful manner. We have here chapters on the dynasties, the people, the Egyptian conquest of Canaan, and on culture and religion. The author, although declaring he writes as an archæologist and as not belonging to any theological school, hardly hides his bias against criticism. Throughout the volume he assumes that the narrative of the Pentateuch is a history and not a fiction, which may be accepted. An opportunity is taken to extol the fitness of paying tithe and writing of the rocky ridge of Bethel, where the limestone rock is fissured into step-like

terraces, "we may fancy we see before us the ladder of Jacob." Noticing the legendary lore of the Phœnicians, it is acknowledged that the account of the deluge is derived from the traditions of Babylonia. The book ends with the remark that true science declares herself a handmaid of the Catholic Church. Some notices of early Egyptian travellers in Palestine read much like a tale in the *Arabian Nights*; one story given would probably result much the same to-day. One, who considers that when staying at home he can learn as much of far countries as the actual traveller, well describes the troubles and dangers of the road. A traveller, says he, is a camel's slave. "Do thou explain," he asks, "this relish for the life of a traveller. Thy chariot lies there before thee; thy feet have fallen lame; all thy limbs are ground small; thy bones are broken to pieces. Thou sleepest. Thou awakest. Has not a thief come to rob thee? Some grooms have entered thy stable; the horses have kicked out; the thief has made off; thy clothes are stolen; thy groom sees what has happened; he takes what is left, and goes off to bad company." Truly an uninviting picture. There is a fair index.

THE ANCIENT CROSSES OF GOSFORTH, CUMBERLAND. By CHARLES ARUNDEL PARKER, F.S.A.Scot. With several illustrations. (Elliot Stock, 8vo, 1896.)

Gosforth, a far-off, lonely, little visited, out-of-the-way, thinly peopled district, as the author describes it, has only lately been changed by the opening of the Furness Railway. Yet, as may be supposed, this cross here so carefully and lovingly described has been before noticed, as in the *Gentleman's Magazine* in 1799 with an incorrect drawing, and later by the Rev. W. S. Calverley, who gave the Institute a paper on the subject at the Carlisle meeting in 1882, and a further elaborated account to the Cumberland and Westmorland Antiquarian Society in 1883. Formerly it is reported there was a fellow column with a horizontal stone between the two. One of these has, within memory, been cut down and converted as part of a sundial for the parson's garden. A full, minute, and interesting description is given with clear illustrations of cross and sculptures, the result of many examinations made in different lights. A chapter deals with the christian meaning of the sculptures, and two other chapters with the heathen meaning, the latter supplied by Professor Stephens, of Copenhagen, F.S.A., the author here arguing that the two meanings, inextricably mixed, were intentionally so mixed by the early Christian missionaries; but there is weakness here, especially if the date of origin is early, as it would be clearer to argue that the later beliefs are the outcome of the earlier myths. Professor Stephens gives the cross to be of Keltic-Anglic type, perhaps about 680 A.D.; others differ, and consider it a monument of the later Danish invaders. Plaster moulds have been taken, and these are now in the entrance of the South Kensington Museum. A most remarkable find was made in 1896, when the early twelfth century north wall of the church was destroyed. This wall was so massive that dynamite had to be used, and when the wall fell there appeared in the foundation a most

charming and interesting "hogback" tombstone, broken unfortunately, after centuries of shelter, by the shock of the blast. Two illustrations are given, one side showing warriors in parley. It must have marked the resting place of a great chief, and perhaps once stood between the two "crosses." A search may prove this. This little book gives a most interesting, careful, and up-to-date account of these remarkable and valuable remains.

SUTTON IN HOLDERNESS. The manor, the berewic, and the village community. By THOMAS BLASHILL, F.R.I.B.A. (Wm. Andrews & Co., Hull; Brown & Sons, London. 8vo, 1896.)

Fortunate indeed is Sutton in having this history, and fortunate has been the author in having such fine documentary evidence at his service, which he has used thoroughly and well. A strange place Sutton must have been in early days, as may be seen by the excellent and clear way the place is here brought before the reader. It is worth note that, perhaps because it was out-of-the-way and hardly accessible, it suffered no damage from the Norman Conquest. Thus, Domesday says that in the time of King Edward it was worth fifty shillings, and now fifty shillings. The next interest is the descent of the family of Sutton, and with this the history and picture of the place comes out, and so on until we are brought down to the sixteenth century. A good account is given of old-fashioned farms, and it is shown how the ancient agricultural system became obsolete and impracticable, the old plan being illustrated by the early maps given. Then came the important undertaking, the enclosure of the common lands, and thus the disappearance of narrow strips or ploughlands. The great advantage of this change is well pointed out, and it was soon found that one acre enclosed yielded as much as three acres before. A capital list of old field names is given, and also some instances of the origin of personal names. Thus John Hogeson gets his name as the son of Roger Watson, Hodge being derived from Roger. Watson, in turn, was the son of Walter, and William Jackson was the son of Jack Adamman. There is an account of Meaux Abbey, its landgrabbing, its often litigation, the antipathy of and quarrels with its neighbours until it disappeared, and so we come to the time of our grandfathers. The whole gives an excellent account of the ways and customs of generations gone, the lords, the vassals, the freemen, and the bondmen. As the author's patronymic appears in early documents and down to later times, we presume this work has been a labour of love, as relating to the place where he has found a local habitation and a name.

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